1	UNITED STATES DISTRICT COURT			
2	DISTRICT OF MASSACHUSETTS			
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4				
5	UNITED STATES OF AMERICA, et al.			
6	Plaintiffs, Civil Action No. 1:21-cv-11558-LTS			
7	V.			
8	AMERICAN AIRLINES GROUP, INC., et al.,			
9	Defendants.			
10	Determanes.			
11				
12	BEFORE THE HONORABLE LEO T. SOROKIN, DISTRICT JUDGE			
13	BENCH TRIAL			
14				
15				
16	Thursday, October 27, 2022			
17	9:00 a.m.			
18				
19				
20	John J. Moakley United States Courthouse			
21	Courtroom 13 One Courthouse Way			
22	Boston, Massachusetts			
23	Rachel M. Lopez, CRR			
24	Official Court Reporter raeufp@gmail.com			
25				

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PROCEEDINGS

(In open court.)

THE DEPUTY CLERK: The United States District Court for the District of Massachusetts is now in session, the Honorable Leo T. Sorokin presiding.

THE COURT: Please be seated.

So I know that by your calculation, we'll be done if we go nonstop from 9:00 to 1:00, and that will conclude all the minutes. And — but I'm accepting Mr. Wall's representation that we can get it done today. And we have to take at least a ten minute break, both for the court reporter and for me, which means that we're ten minutes short, and we can't go over today.

So we can -- for now, I'm just going to leave it to all of you and figure out, and we'll see, and I'm assuming that like, given what's left, we'll be done and it will be fine. But if need be, my solution would be simply to chop ten minutes out of the schedule, and 55/45, or however the split was, and we do it at 11 o'clock, and that comes out to whatever, six and four minutes, but then it would be done at 1:00, but I'd rather just have you work it out than we have to do that. It seems like that's within reach.

MR. JONES: Your Honor, I don't believe it should be a problem today. I think we should be able to keep with the normal schedule and still finish by 1:00.

THE COURT: Finish by 1:00.

MR. SCHWED: Yeah, we agree.

MR. WALL: Just one quick logistical point or process point.

As a result of the decision to receive the expert reports in evidence, we suddenly have to deal with a bunch of related issues. One of them is the sealing of the reports. There's a lot of confidential information. We're really not in a position to deal with that instantaneously.

THE COURT: Here's how I was thinking generally about it. Like I think that the things that have -- I'm going to write a decision, right? And the things that have come up in court, and we've talked about in court and shown on the monitors, I'm just going to refer to and not think about.

MR. WALL: Right.

sealed in the sense that, like, I saw -- the redacted part matter to some of you, in some way, or things that are just sealed, my thought would be, to the extent along the way you can tell me, well, it can be unsealed and it's no problem. Otherwise, I'll see if I need to rely upon -- I'm just going to write the decision based on the evidence that -- the scope of evidence that I described to you yesterday.

MR. WALL: Right. And just for now, could we have

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those under seal?
1
               THE COURT: Yes.
 2
               MR. WALL: The full reports under seal?
 3
               THE COURT: Yes, you can keep that under seal now.
 4
     That's fine.
 5
               They're already sealed, right?
 6
                          It's -- they weren't going into
 7
               MR. WALL:
     evidence, so now they're going into evidence sealed.
8
 9
               THE COURT: So the experts are going into evidence
     sealed, and my thought is if I confront and think my decision
10
11
     has sealed information in it, I'll either, if it seems
     material, I'll, in some way, give you all the chance to weigh
12
13
     in on that before and make that part of the decision public.
     I just don't know, like --
14
15
               MR. WALL: Okay.
               THE COURT: So they're sealed for now and then
16
     we'll just sort of see what's relied upon in the decision.
17
18
               Because I'm not viewing them, like I said
19
     yesterday, as completely in evidence, just, like some
     document, an e-mail, one page e-mail that was put up on the
20
21
     screen.
                          Right.
22
               MR. WALL:
23
                           Because maybe it isn't cited and
               THE COURT:
     referred to, a whole portion. I'm not sure why then.
24
25
               MR. WALL: Understood. That's fine. I think the
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related issue, less important is just clarification, which I
1
     don't think there's any dispute about, there are hundreds, if
 2
     not thousands of other documents that are cited within the
     expert reports, and in receiving -- we're assuming that they
 4
     receiving the expert reports in evidence just --
 5
               THE COURT: It doesn't pull all of them --
 6
               MR. WALL:
 7
                          Right.
               THE COURT:
 8
                           No.
                          Okay. Great. Thank you.
 9
               MR. WALL:
               THE COURT: Anymore than that's just the basis.
10
     Right? Okay. Go ahead.
11
                            ROBERT TOWN, Ph.D.
12
13
        having been previously duly sworn, testified as follows:
14
     CROSS-EXAMINATION BY COUNSEL FOR DEFENDANT JETBLUE, Continued
     BY MR. SCHWED:
15
          Good morning, Dr. Town.
16
     Q.
     A. Good morning.
17
          Can you open up your -- the binder that's in front of
18
19
     you. And you'll see -- that one, yes. And you'll see in the
     front pocket there there's a -- something marked DX-1088.
20
     You can pull it out if you like, and it's entitled "What Can
21
     We Learn From Merger Retrospectives: Lessons From the Airline
22
23
     Industry."
               Do you see that?
24
          I do see that.
25
     Α.
```

- Is that the draft paper we've been talking about over the 1 Q. last day or -- and your prior testimony? 2
 - That is a version of it.
- 0. Do you know if it's the most recent version? 4
- I don't know, because there's two other co-authors, and 5 Α. so they can compile it and send it out, you know, without my knowledge, and so I don't know if this is the last version or 7 not. 8
 - Are you aware of a more recent version?
- I am not. 10 Α.

- 11 MR. SCHWED: Your Honor, we move to admit DX-1088. We understand that the plaintiffs don't have an objection, as 12 long as it's not offered for the truth of the matter.
- MR. HEIPP: That's correct, Your Honor, on that understanding, no objection. 15
- THE COURT: All right. I'll take it in that --16 with that limitation. Admitted as DX-1088. 17
- 18 (Defendants' Exhibit No. DX-1088 admitted into 19 evidence.)
- BY MR. SCHWED: 20
- Q. Can you -- do you have your slide deck in front of you? 21 I think it's maybe the smallest notebook up there. And we 22 can also put up slide 19 on the screen, if that's easier? 23
- That's probably easier, yeah. 24 Α.
- Q. And this is one of the slides you showed yesterday? Do 25

- 1 you recall this?
- 2 **A.** I do.
- Q. Just to be clear that I'm reading it right, this shows a
- 4 net increase of 13 percent LaGuardia seats due to the NEA,
- 5 correct?
- 6 A. Due to the slot -- slot and JetBlue -- I mean, there's a
- 7 couple components to it. There's the JetBlue has got the
- 8 up-gauging A220s, and so that's part of the preNEA order
- 9 book, so it's a little bit of both. Part of it is the slot
- swap and part of it is due to the existing order book.
- 11 Q. Are these actual or predicted numbers?
- 12 A. These are from Raven.
- 13 Q. Okay. And you would recall that Mr. Friedman testified
- that daily peak seats at LaGuardia actually are up 20 percent
- from 2019. Do you recall that?
- A. I don't recall that, but I don't have a reason to think
- it's -- he didn't say that.
- 18 Q. Those increase in -- in seats are a good thing for
- 19 consumers, correct?
- 20 A. It depends. It depends where they are coming in and I
- think there's been discussion here that, about, I think
- 22 Mr. -- Dr. Israel made this point that those planes were
- coming from somewhere, so you have to net out kind of where
- everything is coming from.
- 25 Q. But looking at the New York market or the Northeast

- 1 Alliance markets, that those -- that's a good thing, correct?
- 2 A. It could be a beneficial to those consumers.
- Q. Could we turn to slide 33 of your opening deck from yesterday.
- In this slide, you're criticizing the time periods that Dr. Israel used to show capacity share changes?
- 7 A. Yeah. It speaks for itself.
- Q. And then, in fact, your headline says they're misleading, correct?
- 10 **A.** They are.
- Q. Just so I understand exactly what's been shown here, the
- green line that you have here represents the preNEA period?
- 13 A. That Dr. Israel used.
- Q. Right. And this includes roughly the last nine months
- 15 before COVID?
- 16 A. Approximately, yeah.
- Q. And the red line represents the -- what you might call
- the postNEA period?
- 19 A. It's in the postNEA period.
- Q. And that's the first nine months after the implementation
- of the NEA, roughly?
- 22 **A.** Approximately.
- 23 Q. Both time periods are March through December?
- 24 A. They are.
- Q. And it's important if you're comparing two different

- years, for example, to try to -- if you can, keep the months
 the same to avoid seasonal differences?
- A. Yes, that's true.
- Q. And just so I understand how this chart works, the red line is about eight points higher than the green line?
- A. Approximately.
- Q. And even if you looked at the lowest point after NEA implementation, it is several points above the highest point preNEA, isn't it?
- 10 A. I would say it's about three points higher.
- Q. And the lowest point there would be -- would include the period of time when there were operational issues, correct?
- 13 A. I'm sorry, could you repeat the question?
- Q. The lowest points on the postNEA period would include the last several months when JetBlue is dealing with operational
- 16 issues, correct?
- A. There may have been operational issues throughout because of COVID, which I think there was testimony that that was wrecking havoc throughout the airline industry, but there was also testimony on that point, too.
- Q. But you've also heard testimony specifically about operational issues that have caused JetBlue and potentially others to pull down service in the second half of 2022, correct?
- 25 **A.** I have heard testimony on that.

- Q. You don't have any reason to dispute that testimony, correct?
- 3 **A.** No.
- Q. Now, can you turn to slide 35, please. This is a similar chart, but not limited to the Northeast Alliance. Is that
- 6 fair?
- 7 **A.** That is fair.
- Q. The blue line is actually the same line, I believe, as in slide 33.
- 10 **A.** Yes, it is.
- 11 Q. The black line is all airports, including those outside
- 12 the Northeast Alliance.
- 13 A. That is correct.
- Q. And once again, the postNEA shares are well above the
- preNEA shares for just about the entire period, correct?
- 16 A. On the black line?
- 17 **Q.** Yes.
- 18 A. I think they're pretty close to even, if you compare
- March to -- or you know, the latest data point. They're
- 20 pretty similar.
- 21 Q. I'm sorry, can you say that again? If you compare what
- 22 to what?
- 23 A. If you compare like December 2017 to what is November of
- this year, they're pretty similar. I mean, you'd have to
- look pretty closely to see a difference.

- Q. So if you could -- other than, say, the last four months of this chart, when JetBlue had operational issues, the black line is above every period of time in the post -- withdrawn.
 - Other than the most recent period of time, the last few months, when JetBlue has had operational issues, the black line in the postNEA is above the black line in every for the entire preNEA period, correct?
- A. If you lop off the part where it's declining, that is true.
- Q. And again, those -- you don't have any reason to dispute that the decline --
- THE COURT: Is it really just higher the whole time? Maybe I'm misreading the chart.
 - MR. SCHWED: I think it is, Your Honor, and if you take any point in time -- and I'll ask it as a question to the witness, maybe.
- 17 BY MR. SCHWED:

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- Q. If you take any point in time, let's say, before June of 2022 and compare it to any point in time before -- in 2019 or
- earlier, I believe the black line is higher; is that correct,
- 21 Dr. Town?
- 22 **A.** From June, you know, going backward?
- 23 **Q.** Yes.
- A. Yes, I think at the end, it's pretty similar.
- Q. Using the last, say December to September, it's pretty

```
similar?
 1
     A. Pretty similar to December -- well, I'd have to look.
 2
 3
               THE COURT: Well, can you compare December 2017 to
 4
     September -- in other words, is it -- like is it a fair
     compare to compare December to September?
 5
          You probably want to compare the same months.
 6
 7
          I mean, just as a layperson, would you agree with me that
     in December there might be a peak in travel because of the
 8
     holidays?
 9
               THE WITNESS: Oh, yeah. That's true.
10
11
               THE COURT: And wouldn't there, in September, be a
     dip?
12
13
               THE WITNESS: That is true. However, if you just
14
     compare.
               THE COURT: And would that suggest that September
15
     is a bad comparison or a fair comparison to December, in any
16
     given year?
17
18
               THE WITNESS: I think it's neither. It's probably
19
     not the best comparison, but if you compared, you know,
     October to October, they're close. You know, it's maybe a
20
     little bit above in October of 2022, but it's not a lot
21
22
     above.
23
               THE COURT: I see. Okay.
     BY MR. SCHWED:
24
```

Q. Just to put a finer point on that line of questioning,

- September of 2022 is higher than September 2019, correct? On the black line?
 - A. Yeah, I think that's true.
- Q. And even December of 2022 is higher than December of 2019. Maybe not a lot higher, but a bit higher.
- **A.** Did you say December?
- Q. December of 2022 is higher than December of 2019, maybe not a lot, but by a little.
- 9 A. I don't think December is made -- is in the data.
- 10 Q. Oh, is that November?
- 11 A. Yeah, it ends in November.
- Q. Okay. And November is higher than November -- let me ask
- you a better question. November of 2022 is higher than
- November of 2019?

19

20

21

22

- THE COURT: How can there be data for November of 2022.
- MR. SCHWED: I'll let the witness answer.
 - THE WITNESS: This is from OAG data and it has the schedules going out, so this is the schedules that are anticipated to fly in --
 - THE COURT: So this would be -- this would be based on schedule data, not actual passenger data for November of 2022.
- 24 THE WITNESS: That's right, most of the data.
- 25 THE COURT: In fact, most of this is --

```
THE WITNESS: That's correct.
1
                THE COURT: Okay.
 2
                THE WITNESS:
                              I'm sorry. Can you ask the question
 3
     again?
 4
     BY MR. SCHWED:
 5
          So December, even -- I'll move on, I think the chart
 7
     speaks for itself.
               And just to understand, you don't have any reason
 8
     to dispute the testimony that the operational issues that
 9
     we've heard about are temporary, do you?
10
          I don't have a reason to doubt that.
11
          Now can we turn to slides 38 and 39 from yesterday?
12
     These slides, you compare Dr. Israel's predicted growth,
13
14
     based on the Raven output with his actual growth predictions,
     correct?
15
          That is correct.
     Α.
16
          This was done on a route by route basis?
17
18
     Α.
         Yes.
19
     Q.
          Are you aware that Raven calculates passengers and shares
     on a different route basis than Dr. Israel used for actual
20
     growth?
21
          I'm sorry, can you --
22
23
          Yeah. Are you aware that Raven calculates passengers and
     0.
     shares on a different route basis than Dr. Israel used for
24
```

actual growth?

- A. I'd have to go back and look at that, so I don't know if that's true or not true.
- Q. So do you recall that Raven calculates shares on what's referred to as an O&D, origination and destination basis?
- 5 A. That's my understanding, yes.
- 6 Q. And Dr. Israel used segment basis?
- 7 A. That is my understanding.
- Q. So, for example, if you took an itinerary, say
 Jacksonville-JFK-Paris, are you with me?
- 10 **A.** Yeah.
- 11 Q. Raven would use the pairs at Jacksonville-Paris, correct?
- 12 A. Correct.
- Q. And Dr. Israel would actually be looking at two different
- segments, Jacksonville-JFK and Jacksonville -- JFK-Paris,
- 15 right?
- A. That may be true. I would have to dig into it, but they still should be correlated, you would think.
- Q. But you would agree with me that, if that is the case,
 one might say that your comparing segments to O&Ds is not an,
 as you might say, an apples to apples comparison?
- 21 A. I don't -- I don't agree with that.
- Q. And another reason the results could be different is that, under Raven, everything besides American's and
- JetBlue's schedule was held constant. That's the way Raven
- 25 works, right?

- A. That is the way Raven works.
- Q. And that would include, for example, competitor schedules.
- A. Yeah, I should say that's not how -- the schedule that was inputted into Raven made that assumption.
- Q. And in the real world, competitors can change or add routes and schedules, correct?
- 8 A. Yes.

- 9 Q. For example, since the NEA, Delta and United have added flights at NEA airports?
- 11 A. I'd have to look.
- 12 Q. Do you recall hearing testimony about that?
- 13 A. I do recall.
- Q. And those types of schedule changes, which were not
- accounted for in Raven, would affect American and JetBlue
- shares in the actual postNEA data, right?
- 17 A. That is true.
- 18 Q. Now, let's turn to the -- briefly to capacity discipline.
- 19 You said you addressed the legacy airlines bankruptcies by
- adding annual indicators for bankruptcy?
- 21 A. Annual indicators from the period 2000 onwards.
- 22 Q. And just so I understand it, those annual -- for example,
- if you have -- United and US Airways both declared bankruptcy
- 24 in 2002?
- 25 A. That's correct.

- Q. So you would have added an annual indicator for 2002?
- A. 2002 is one of the -- yes, one of the annual indicators.
 - Q. But the annual indicator for an airline's bankruptcy would end when that airline came out of bankruptcy?
- A. No, it's for every year. That's its own separate indicator.
- Q. You didn't have an annual indicator addressing financial performance when an airline was not in bankruptcy, correct?
- A. It's an annual indicator that would pick up any deviation from the historical relationship between GDP, fuel prices, and ASMs, that would be driven by what you're suggesting.
- Q. But if, for example, are you aware that, between the time that you exited bankruptcy and start the alleged capacity period, United lost two and a half billion dollars?
- A. I am aware they lost a lot of money during that period.

 But if that was affecting their capacity decisions and that

 was materially impacting industry capacity, then it would

 show up as a gap in my analysis.
- Q. And, in fact, of the 2 and a half billion, 1.9 billion was lost in 2008?
- 21 A. That may be true. I don't know specifically.
- Q. And you would agree with me that after losing
 \$1.9 billion in 2008, United might have decided to change its
 approach to capacity to try to turn things around?
- 25 A. It could have.

2

- **Q.** And it could have done so unilaterally?
- A. It could have. I think the evidence suggests that there was capacity discipline involved.
- Q. Now, you've also argued -- you've criticized Dr. Lee's inclusion of load factor and LCC-RPM share and regressions as endogenous, correct?
 - A. That is correct.

7

8

9

- Q. And he testified that he tested for endogeneity by using instrumental variables?
- 10 **A.** I think that's roughly what he said.
- Q. And you do agree that instrumental variable regression is a standard econometric method used to address endogeneity, right?
- A. It is used to address endogeneity, but it's not a fix.

 You have to have -- there are very specific criteria that
- need to be met. Your instrumental variable has to meet those
- criteria, and if it doesn't, then your approach is invalid,
- would yield biased estimates. And there's a -- economists
- worry about this issue a lot. They -- you know, if you're
- doing an instrumental variable.
- Q. Dr. Town, I don't mean to interrupt, I just asked if it was a standard method. That was the question.
- A. It's used quite frequently, but there are specific requirements for it to yield accurate estimates.
 - Q. One way to test the instrumental variables is called a

weak instrument test?

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- A. That's one -- there are two criteria that the variables need to meet and that will test for one of them.
- Q. And do you agree that Dr. Lee used -- when he used the instrumental variable regression, he found that his instrument passed the weak instrument test, correct?
- 7 **A.** It did and that's not surprising in a time series context.
- 9 Q. And just to understand, the difference between you and 10 Dr. Lee -- well, withdrawn.
 - Let's just assume for the moment that you are right about capacity that your regression is right. And I want to understand, just to make sure we understand we're all on the same pages to the limits of what it does, what it does show is that, in 2009, aggregate legacy capacity began to deviate from what you predicted?
 - A. I'm sorry. Can you repeat that?
- Q. Yeah, your regression shows, if it's correct, that in around 2009, aggregate legacy capacity began to deviate from predicted aggregate capacity?
 - A. I think that's correct.
- Q. And it doesn't -- your regression itself does not show why capacity began to deviate, correct?
- 24 A. It does not, in and of itself. You need more --
- Q. Yeah, and your regression does not identify why capacity

- returned to predicted levels around 2018, correct?
- 2 A. It doesn't explain why, no.
- Q. And you have no opinion on what might need to change in the market for capacity discipline to return, right?
- A. I don't know that I'd say no opinion. I think I can identify factors that might influence it, but I can't point to a specific causal lever.
- Q. You don't have a set of criteria, for example, that you've identified, ex-ante. To predict if capacity discipline might return. In other words, my regression showed that if X, Y, and Z happened, that's going to cause capacity discipline. You don't have that, right?
- 13 **A.** I agree with that.
- Q. And you've done no quantitative or econometric analysis showing that the NEA will increase the risk of capacity discipline returning?
- A. I have not quantified that, but I relied on the evidence that JetBlue is a maverick, and now coordinating capacity with American.
- Q. And you've also heard the evidence that JetBlue will continue to be a maverick, correct?
- 22 A. I've heard that testimony.
- Q. Can we turn to slide 41. And your opinion is that the defendants overstate the importance of the DOT commitments, correct?

- 1 A. That is correct.
- Q. It's not your opinion that the commitments have no value,
- 3 correct?
- 4 A. I did not claim that, no.
- 5 Q. And the commitments you discuss on these pages, this one
- and the next one, are only the growth commitments, right?
- 7 A. I'm sorry, can you ask that?
- Q. Yeah, you only are discussing the growth commitments on
- 9 these pages?
- 10 A. Yes, that is.
- 11 Q. And you are aware that there are other commitments in the
- 12 DOT agreement, correct?
- 13 A. I believe they are, yes.
- 14 Q. Limits on JetBlue's ability to exit certain routes?
- 15 A. I believe that's true.
- 16 Q. Limits on what the parties can discuss?
- 17 A. I believe that's true.
- 18 Q. Recordkeeping requirements?
- 19 A. I believe that's true.
- 20 Q. Reporting requirements.
- 21 A. I believe that's true.
- 22 Q. And the DOT retains the ability to monitor American's and
- JetBlue's behavior at all four airports going forward, right?
- A. I believe they have regulatory oversight in that regard.
- Q. And the second bullet here, the one that says the DOT

- baseline, that takes issue with the baseline for measuring the growth commitments?
- A. It takes -- it just states that. It doesn't include this planned growth.
- Q. Are you -- is it your view, are you opining that the DOT somehow made an error in its judgement as to what to do for the baseline?
- A. No. I'm just saying that the defendants are overstating the importance of those commitments.
- Q. Now, let's turn a little bit to what -- to slide 43, if
 we can. And your first bullet refers to a comparison of the
 codesharing aspects of the Northeast Alliance and the
 codesharing aspect of the WCIA, correct?
- 14 A. That is correct.
- Q. It does not involve a comparison of the entire WCIA to the entire Northeast Alliance, correct?
- 17 A. It does not.
- Q. And you recognize that the benefits of the entire

 Northeast Alliance are much greater than the benefits of

 codesharing alone, correct?
- A. Insofar as capacity is driving if that's what you're asking, I think it's about capacity that's driving the implied growth from the NEA that's, you know, done in the Raven runs.
- Q. And codesharing is a small part of the capacity growth

within the Northeast Alliance?

- 2 A. That is what the Raven runs indicate.
- Q. And in fact, American analyzed the codesharing alone relationship before entering the Northeast Alliance, correct?
- 5 A. That is my understanding.
- Q. And it concluded that it doesn't allow American to truly create optimal customer value?
- 8 A. I don't know about that exact quote.
- 9 Q. Does it sound right to you?
- 10 A. It wouldn't surprise me.
- MR. SCHWED: Andy, would you call up PX-279 and slide 6.
- It's in your book, but it may be easier to look here.
- 15 BY MR. SCHWED:
- Q. You don't have -- you see the headline there,

 "partnership with codeshare only doesn't allow us to truly

 create optimum customer value." You don't disagree with that

 that that was American's analysis at the time, do you?
- 20 A. I agree that they said it on this slide, yes.
- Q. Okay. And then if you look at the last bullet point in bold, it says, "Codeshare alone does not maximize customer connectivity, nor does it provide the most compelling schedule offering required to be competitive with Delta and United." You don't disagree with that assessment, do you?

A. I agree that they wrote that here.

benefits as the NEA, right?

- Q. And JetBlue also analyzed the codesharing alone relationship, and concluded that it didn't create the same
- 5 A. They may have. I don't recall it directly.
- Q. Codesharing alone would not involve the replacement of
 American's smaller planes with JetBlue's bigger ones, right?
- 8 A. No, it wouldn't.

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- 9 Q. Codesharing alone would not involve any benefits of improved schedules, right?
- 11 A. No, it wouldn't, but it doesn't necessarily preclude it, 12 but alone, no.
- Q. Well, it wouldn't allow the parties to work together to improve the schedules. They'd have to just operate independently and guess what the other is doing, right?
- A. It will -- unless their -- that's true, if it's only codeshare, I would agree with that.
- Q. And you have not done any analysis to refute the conclusion that both airlines came to regarding codesharing, right?
- A. No, I would point out, I think there was some testimony about the WCIA that mentioned -- there's no -- they did codesharing.
- Q. I'm just asking -- I'm very short on time, did you do any analysis?

- A. I did not do any specific analysis.
- Q. Thank you. You also offered the opinion that American and JetBlue could enter an arrangement like the WCIA, right?
- 4 A. They considered it.
- Q. And you have not done any analysis of the benefits that would have been generated from JetBlue and American entering that type of relationship, correct?
- 8 A. That is correct. I testified to that on my direct.
- Q. And you actually said you couldn't do such a comparison, because you don't have a network planning department,
- 11 correct?

- 12 A. I believe that's what I said.
- Q. Are you aware that there are vendors that provide services like that, such as ABG Sea Berry.
- A. Sea Berry works with JetBlue, and so I think that would be good work with them, and so -- but the key part of that analysis is the schedule and --
- 18 Q. Can you just answer the question?
- 19 A. I am trying to answer.
- MR. HEIPP: He is trying to answer the question.
- 21 BY MR. SCHWED:
- 22 **Q.** My question was whether you were aware of the vendor?
- 23 **A.** I am.
- Q. That was the question and you didn't contact that vendor.
- THE COURT: I think the thing that would help is,

as a witness, you're not the only person who's experienced this, but the thing about being a witness is you don't get to give a soliloquy, you don't get to teach the class, you don't get to speak whatever you want. All you get to do is answer the precise question he asks. And that there may be an explanation that means that the point he's making maybe is dumb, maybe it's brilliant. But to the extent that you think it's dumb or there's an explanation, you don't get to say it. You're stuck with the point, and that you have an army over here, just like there's an army over there, and if they think it's a dumb point or that there's an answer to it, they will ask that — tell us why. And it will require — and that's —

And so it's particularly because they're all time limited and they're running out of time, like at the end of the basketball game, right, and so you need to just answer the precise question.

So now whatever the question is, Mr. Schwed, because I know that I don't remember it anymore, so I doubt anybody else does.

BY MR. SCHWED:

- Q. So just so you're clear, you're aware that there's vendors that provides these kind of services?
- 24 A. I am aware.
- 25 Q. You did not attempt to contact any such vendor to see if

- 1 they'd work with you?
- 2 A. In this matter, that's correct.
- Q. And American, in fact, did analyze a WCIA-like arrangement with JetBlue, correct?
- 5 A. That is my understanding. Yes.
- Q. And as with -- its determination of codesharing, you concluded that the Northeast Alliance would be better for consumers, correct?
- 9 **A.** I'm not sure that they -- they said it created more value, I'm not sure if that translated into consumer benefit.
- Q. The WCIA would not create the value of network optimization or schedule coordination, correct?
- 13 A. The value that calculated was less than.
- Q. But I'm just saying, just in concept, the WCIA, applying
 the WCIA between JetBlue and American would not allow network
 optimization or schedule coordination, correct?
 - **A.** That is likely the case.
- Q. And you're aware that those are the very features that
 led to the growth that was presented to the American board in
 the slide I believe Mr. Raja referred to as the eureka slide.
- 21 Do you recall that?

- 22 A. I'm sorry. Can you --
- Q. Yeah, the schedule optimization and coordination are actually the features that led to the -- much of the growth that was in the eureka slide that Mr. Raja testified about

- that was presented to the board, right?
- A. I would have to review that, but I'll take your word for that.
- Q. Okay. And you have no evidence to show that an arrangement like the WCIA was ever presented to JetBlue?
 - A. I'd have to -- I don't recall any at this moment.
- Q. You have not assessed whether a WCIA-like arrangement would have made financial sense for JetBlue, correct?
- 9 A. No, I have not made that assessment.
- Q. You have not assessed the benefits of American doing a similar arrangement with JetBlue, correct?
- 12 A. I have not done the financial analysis of those, no.
- Q. And just speaking more broadly, Dr. Town, you have not calculated the benefits associated with any so-called less
- restrictive alternative, correct?
- 16 A. That is correct, as I testified earlier, yes.
- Q. And you have not offered the opinion that any so-called less restrictive alternative achieved substantially the same
- benefits as the Northeast Alliance, correct?
- 20 A. I have not quantified it.
- 21 Q. But you're not -- just -- I'm just asking this question.
- 22 You have not offered the opinion that any so-called less
- restrictive alternative achieved substantially the same
- benefits as the Northeast Alliance. Isn't that correct?
- 25 A. I don't think I -- I think I say something different in

- 1 my report than you're suggesting.
- Q. You're offering the opinion that it -- you've calculated
- 3 that it achieves substantially the same benefits as the
- 4 Northeast Alliance?
- 5 A. No, I have not quantified it.
 - MR. SCHWED: Thank you. No further questions.
- 7 THE COURT: All right. Any redirect?
 - MR. HEIPP: Thank you, Your Honor.

REDIRECT EXAMINATION BY COUNSEL FOR PLAINTIFF USA

10 BY MR. HEIPP:

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- 11 Q. Just a few questions for you, Dr. Town. You were asked a
- number of questions yesterday about whether Dr. Israel's
- consumer benefits calculation approximates what would be
- derived using a logit demand curve? Do you remember those
- 15 calculations?
- 16 **A.** I do.
- 17 Q. Can you remind us what kind of a demand curve Dr. Israel
- 18 did use?
- 19 A. He used a linear demand curve.
- 20 **Q.** Is excluding part of the benefits using linear demand an
- 21 accurate approximation of the benefits from using logit
- 22 demand?
- 23 **A.** No.
- Q. And regardless of what kind of a demand curve that you
- choose under Dr. Israel's methodology, would you get any

- benefits if there's no assumed increase in capacity?
- 2 **A.** That's correct. You would not get benefits unless there's increases in capacity.
- Q. And relatedly, you were asked a few questions about

 JetBlue's stand-alone growth plans. Do you remember those

 questions?
- 7 **A.** I do.
- Q. What did Dr. Israel's analysis assume about JetBlue's growth plans going forward?
- A. He assumed that there would be no growth for JetBlue going forward.
- Q. Yesterday Mr. Schwed asked you a number of questions
 about the draft working paper about the American/US Airways
 merger, and it was moved into evidence this morning. Do you
 remember those questions?
- 16 **A.** I do.

- Q. Why did you put that paper on hold?
- Because there's a lot of flaws in how you would identify 18 Α. the impact of the merger. And in this retrospective there is 19 some flaws. There is -- particularly, there is the control 20 group is contaminated, there's issues with the treatment 21 group insofar as there's this -- the Wright Amendment 22 23 problems. So there's a lot of problems with applying the difference in difference approach to this -- in this setting. 24 And we need to figure out those solutions before we can go 25

forward.

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- Q. Do you recall, actually in the draft paper, pointing out some of those problems with the control group?
- 4 A. Yes, I believe so.
- Q. Do you recall what the paper preliminarily concluded about the American/US Airways merger, if you accounted for the divestitures?
- A. I think if you counted for divestitures, my recollection is that it did not increase passengers, but I'd have to review it. It's a little murky.
- Q. Yeah. Actually, if you want to take a quick look at it, do you have it there? I'm not sure it was handed out to you or not, but we can give you a copy.
 - A. Where did it go? Oh, here it is.
- Q. If you want to just quickly take a look, and I won't have you read it out loud, but just to refresh your recollection.
 - MR. HEIPP: And if we can just take it down from the screen, actually.
- THE COURT: Which part do you want him to read?
- MR. HEIPP: If you look at -- it's the bottom of
- 21 page 5, it's page 5 of the internal pages, bottom of --
- 22 BY MR. HEIPP:
- Q. There's a paragraph that starts, "There is also a large
- 24 literature." Do you see that?
- 25 **A.** Yeah.

- Q. If you look at the end of that paragraph, on the next page?
- 3 **A.** Yeah.
- Q. And if you can just read the last couple of sentences to yourself.
- 6 A. Yes, I've read that.
- Q. Does that refresh your recollection about what these preliminary results concluded, if you accounted for the divestitures?
- 10 **A.** Yeah. They point to a different interpretation of the impact of these mergers.
- Q. Different interpretation than what the Carlton and Israel paper concluded?
- 14 A. Correct.
- Q. Okay. You can put that to the side. Thank you.
- Just a moment ago, you were asked about third party vendors that provide services related to network planning.
- Do you remember those questions?
- 19 **A.** I do.
- Q. I imagine you do. Do those vendors, to your knowledge, create entire airline network schedules?
- 22 A. To my knowledge, I don't know if they do or not. But 23 it -- it wouldn't surprise me if they don't.
- Q. Does American and JetBlue have network planning
 departments, despite the existence of those third party

vendors?

- 2 A. They do.
- 3 Q. Okay. Just one last set of questions, Dr. Town. You
- 4 were asked yesterday about American and JetBlue's growth
- 5 relative to other airlines and whether you had looked at how
- 6 the two had funded growth across their networks. Do you
- 7 recall that?
- B**a.** Ido.
- 9 MR. HEIPP: Could we put up slide 37 from your
- 10 demonstratives.
- 11 BY MR. HEIPP:
- 12 Q. Can you remind us what this graph is, Dr. Town?
- 13 A. Yeah, this is the graph of the percentage change in
- capacity for American/JetBlue combined, Delta and United from
- 2017, up to November or October of this year.
- Q. Under the defendants in Dr. Israel's theory that the NEA
- has led to an increase in capacity, what would you expect
- 18 this graph to show?
- 19 A. I would expect the blue line to be above the green and
- 20 red lines.
- 21 **Q.** And what does it actually show?
- 22 A. It shows that it's below -- it's in between, it's below
- 23 United and above Delta.
- MR. DERITA: Thank you, Dr. Town, no further
- 25 questions, Your Honor.

1 MR. SCHWED: Just a few.

RECROSS-EXAMINATION BY COUNSEL FOR DEFENDANT JETBLUE

3 BY MR. SCHWED:

- 4 Q. If you leave this slide up, slide 37, it shows that until
- 5 JetBlue started having operational difficulties, in fact, the
- 6 blue line was above the other lines, correct?
- 7 A. Until -- it was above until June.
- Q. Yeah, and that's when JetBlue started pulling down
- 9 capacity to address its operational issues, correct?
- 10 A. I'd have to review that testimony, but --
- 11 Q. And then if you could just look at your -- your article
- 12 that you were shown before?
- 13 **A.** Yeah.
- 14 Q. And turn to page 4. Just at the bottom of the second
- paragraph, you are saying -- you're talking about the
- United/US Air merger, and it says, "This suggests that the
- merger was consumer welfare enhancing," right?
- 18 A. I'm sorry, can you --
- 19 Q. Yeah, the bottom of the second paragraph of page 4?
- 20 A. I think we're not on the same page.
- 21 **Q.** Of your article, page 4?
- 22 A. I got -- oh, yes. I'm with you.
- Q. "This suggests that the merger was consumer welfare
- 24 enhancing."
- Do you see that?

A. I do.

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- Q. And that merger that that's talking about is the United -- the US Air/American merger, correct?
- 4 A. It is referring to that.
- Q. And if you turn to page 32 and if you look at the paragraph that begins, "While," do you see that?
 - A. I do.
- Q. The third -- at the end of the second line, "Divestiture market fares decreased 6.6 percent, with no differential impact and presumption markets. Total traffic increased by a substantial 16.5 percent in divestiture markets with little evidence of a differential impact for presumptive markets."

 Do you see that?
- 14 **A.** I do.
- Q. And by the way, divestiture markets as you defined them
 in this paper, included any route that touched any airport
 where there was any divestiture, right?
- 18 A. I think that's correct.
- Q. So for example, the entire -- and by the way, in that
 paper, you defined the New York City market to include all -all three New York airports, right?
- A. It's an observation. Market -- it's an observation.

 They're grouped together in this analysis.
- Q. But that's how you looked at it in this paper. You looked at New York City market as all three airports,

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     correct?
          Yeah, to be conservative, that's why we did it.
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          And just to clarify my prior question, you defined a
 3
     Q.
     divestiture market as one where any city there was a
 4
     divestiture, correct?
 5
          I believe that's true.
 6
          So in your analysis that showed increased traffic,
 7
     decreased fares, the entire New York market in the NEA would
 8
     be considered a divestiture market, just like it was in this
 9
     paper, right?
10
11
          Well, that's a -- are you taking an antitrust market or
     the market we're using?
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13
          The market the way you did this analysis?
     Q.
14
     Α.
          Well, they're grouped in this analysis.
               MR. SCHWED: Nothing further.
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                THE COURT: All right. Thank you very much.
16
     You're excused.
17
               Next witness?
18
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                MR. JONES: Your Honor, the plaintiffs call
     Dr. Miller, and my colleague, Mr. Derita will be handling the
20
     examination.
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                THE COURT: Okay.
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                (The witness was duly sworn.)
                MR. DERITA: Good morning, Your Honor.
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                THE COURT: Good morning.
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MR. DERITA: We have some demonstratives that 1 Dr. Miller has prepared and we're going to publish those to 2 3 the gallery. THE COURT: Go right ahead. 4 NATHAN H. MILLER, Ph.D. 5 having been duly sworn, testified as follows: 6 DIRECT EXAMINATION BY COUNSEL FOR PLAINTIFF USA 7 BY MR. DERITA: 8 Q. Dr. Miller, I assume you've heard testimony from 9 defendants' experts that critiqued your testimony and your 10 11 reports. What's your reaction to that testimony? 12 Well, I've read it. I've analyzed them. I've determined 13 14 that the defendants' economist experts' critiques of my analysis are flawed, and so I still think what I think, which 15 is that the NEA effectively eliminates competition between 16 American and JetBlue. It gives them incentives to increase 17 price and reduce output, especially in these -- in overlap 18 19 markets, especially in the nonstop overlap markets. I want to talk about why your conclusions haven't 20 changed, and we'll start with Boston. 21 Did you hear any testimony from defendants that 22 23 change your prediction that the NEA would lead to harm there? I have not. And with respect to market definition 24 Α. itself, I just think it's relevant to note that the treatment 25

of Boston as a unique endpoint for the purposes of market definition does not appear to be contested by the other side's economist. The loss of competition in Boston alone is substantial, and given the results that I — that I obtained, I get a 428 million of overcharge, just on the Boston routes.

- Q. So there's been a -- some testimony about whether Newark is in the same market as JFK and LaGuardia. What's your reaction to that?
- A. My first reaction is that, in terms of the economics and the magnitude of the effect, it's not that important. You lose you know, if you were to run the whole analysis including Newark in, you the harm falls from 969 to 927, so it's a gap of 70 million. Substantial, but you're left with a big number at the end of the day. But also, I still think that the economics show that the more appropriate markets for the purposes of evaluating the NEA involve defining LaGuardia and JFK as separate end points from Newark. And I showed you a number of different analyses on direct and they really fall into two buckets.

One bucket are analyses of the way consumers make decisions, and I showed you that consumers seemed to -- there seems to be this preference for LaGuardia and JFK among a subset of consumers that applies an amount of differentiation is relevant. And the other sort of evidence that I presented, the other class of evidence, is that firms,

American and JetBlue in particular, seem to be making business decisions that are consistent with that differentiation from consumers. And I did a little bit of that supply side and I'll show a couple more to flesh out that side of the bucket.

Q. In his testimony, Dr. Israel seemed to be saying that the conclusions you draw based on the merger guidelines analysis that you did are wrong.

How would you respond to him?

A. Well, the Horizontal Merger Guidelines really poses a pretty simple question. In this context, it's -- the question is whether enough customers that currently fly out of JFK and LaGuardia would switch to Newark for a price increase out of JFK and LaGuardia to be unprofitable. And you know, the -- together, the evidence indicates that the answer is no and I don't think that it's really a close call. And the reason is that if you look at JFK and LaGuardia, you've got competition not only between American and JetBlue, but also between Delta and a number of other carriers, and that competition matters. And so the thought exercise of the loss of competition at JFK/LaGuardia, well, that's going to create market power, and that's the sort of thing that the guidelines test is trying to get at.

And that's why I said it's not really surprising that, when you put this through a formal model, you get the

answer, and I think Dr. Israel actually says something pretty similar, like, of course the model is going to find this, if you merge everything together at those airports. So the answer to the specific question posed by the Horizontal Merger Guidelines, I think, is actually pretty clear in this case.

- Q. Dr. Israel concluded that Newark and LaGuardia and JFK are all in the same market. What has he done to support that conclusion?
- A. Well, I mean, his claim, as I understand it, is we just can't leave out United's hub in Newark, and I haven't found that he ever tests this assertion or provides support for it. It's more of a claim. He says it's obviously not doable. And he says that if I if he went through a complicated method that told me a hub carrier in New York was not part of the market, I would just be certain that the method was wrong. So actually, I want to digress a little bit.

He calls the model complicated. This is not a complicated model for economists. It's been in our toolkit for 25 years. It's the sort of model that I teach to my Ph.D. students in the second week of class. So it's a well vetted model. We understand how this thing works. But the big picture here is that Dr. Israel, as far as I can tell, doesn't provide analysis that supports — that supports sort of, I think, his opinion or his assertion.

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Q. You mentioned you looked at some documents regarding market definition. What were you referring to?

Yeah, I wanted to give a little bit more context around the idea that the decisions that American and JetBlue make are consistent with this differentiation from the -- are consistent with the notion that some consumers just prefer LaGuardia and JFK. And I've already talked a little bit about that, and I showed you in my direct testimony that price matching is more likely to happen between LaGuardia and JFK than it would be between JFK, LaGuardia, and Newark, for example, but these are two documents. The one on the left is interesting because it's a JetBlue document that talks about the New York City -- the New York focus city, which is, I understand it, includes Newark and JFK and LaGuardia, but it mentions that flying out of Newark strengthens them in New York City, and it brings low fares to customers and it increases a catchment area that doesn't largely overlap with LaGuardia and JFK. So here you have a document that refers to a strategy around New York, overall, but even within that New York focus City is making different decisions for Newark and JFK, and recognizing that these are sort of different places and consumers see them differently.

Now, the one on the right is a JetBlue document, and it's an analysis -- I mentioned this, but I didn't show this document last time. It's an analysis of whether JetBlue

should enter San Juan from Newark. And the top of the document, it notes again that the large majority of JetBlue's JFK/San Juan catchment is east of the Hudson River. And it points out that opening New York, at the bottom, you see opening to Newark to San Juan provides an opportunity to expand in San Juan, without cannibalizing existing JFK demand.

So this is a document from 2010. It's a little bit older, but I've also shown you the deposition testimony of Mr. Laurence who says that, indeed, there is a difference in the catchment areas of JFK and LaGuardia and Newark. On the other hand, also that JFK and LaGuardia have similar catchment maps. And in the context of this investigation, Mr. Laurence confirmed that that is likely still the case today, even in the presence of COVID.

- Q. Dr. Israel mentioned that your model is a national one, not a local one and that local models face weak instruments. Is he correct?
- A. He's -- I think it's a misleading argument. And I thought I was going to have to explain weak instruments, but maybe I don't. Just for a little bit of background, I used instrumental variables in my model, and the purpose in estimation is to tease out causal effects from correlations. So that's the context. And when you use instruments, you want them to satisfy a couple different conditions, just as

was explained. One of which is that you don't want the instruments to be so-called weak. Okay. So that's the backstop. The baseline model that I have is a national model and I think that's the right one to use. It uses all the information that we have throughout all the routes. But it is the case, if you estimate nationally, that you don't have all of the very specific local decisions, and that's relevant for my analysis in the sense that, you know, there are some metropolitan areas that I tried to focus in more because they matter here, like Boston, New York, and D.C. And so I looked at each of those individually. And what I found looking with — in New York specifically is that the baseline results I get from the national model are corroborated if you look specifically and separately analyze the decisions that consumers make in New York.

Now, Dr. Israel mischaracterizes what I wrote about weak instruments in the context of these checks. The JFK/LaGuardia specific estimates pass a test for weak instruments. So I view them as reliable and a useful corroboration of what I find with the baseline model.

When I look at the JFK/LaGuardia specific estimation, all of the markets pass the horizontal market test using that specific model, and that makes economic sense. Again, it's the competition that JFK and LaGuardia matters. And if you lost all of that competition, then it

could have negative repercussions for consumers.

- Q. There's been some mention of the circle principle. What's your take on how Dr. Israel applied the circle principle to the New York area airports?
- A. Well, let me first give, just to put this in context, give a notion of what this circle principle is. The idea is that if you've got two products on the market, and then there's a sort of another product that's sort of in you know, a closer substitute to one of the two, than the two are, then they should to market, as well. So that's what we're talking about here.

And market definition often begins with common sense groupings. So I start with airports, as that sort of the common sense recognizable groupings, and I apply the market definition principles in that context, including the circle principle. You know, if they're an airport that was, you know, closer to JFK than LaGuardia, I would include that. And if there were — you know, if there were an airport that was closer to LaGuardia than JFK, I'd include that, too. But there's not, so I don't. You know, my approach here is simple and it's consistent with the economics, and it's consistent with the evidence, as I understand it.

Like if you think about a lot of the competition here, there's -- you can put it in three buckets between JetBlue and American coming out of LaGuardia and JFK.

Sometimes they fly -- they both fly nonstop routes coming out of JFK. Sometimes they both fly nonstop routes coming out of LaGuardia. You know, sometimes they both fly -- one of them flies out of JFK nonstop, and the other flies out of LaGuardia nonstop, and those are the combinations.

And so in principle looking at this, you can go route by route, and sort of do something more granular, like focus on one, focus on the other, focus on the other, but to me, that doesn't make a lot of sense, because we already know in the record that the catchment areas of LaGuardia and JFK are similar, and we know that when -- when JetBlue and American look at matching prices, they're more likely to match across those two airports. And so it's just a simpler approach to just put JFK and LaGuardia together and then apply the same structure across all of the routes.

- Q. I believe you have prepared a slide that provides an example. Can you walk us through it?
- A. Yeah. And this is -- I can. And this is showing how, I think, Dr. Israel's argument about the circle principle, it actually can lead to -- it's misguided and can lead to funny conclusions or peculiar conclusions, maybe I should say, and I'll consider the case of JFK and LaGuardia to Phoenix. All right? And in this particular market, there's three carriers that serve it nonstop from JFK. Delta, JetBlue, and American all serve it nonstop. And you know, what I've been able to

learn about this industry tells me that that competition is likely to be meaningful. And if you had a loss of competition between those three nonstop carriers, between JFK and Phoenix, that would be meaningful consumers. So in some sense, we've already answered the question. This is going to be a relevant market.

Now, as part of my common sense groupings, I also include connects from JFK and from LaGuardia in the market. And so Dr. Israel's assertion is that because I include the small connect routes, I also had to bring all of the Newark routes into the market. And that just doesn't make sense to me. It's like the tail, you know, wagging the dog. It's saying the smallest, most inconsequential routes, these small connect routes, because those are in the market, I've got to bring in a whole other — a whole other nonstop competitor from Newark, even though the bulk of the data indicates that substitution from JFK to LaGuardia to Newark is limited, and unlikely to constrain the exercise of market power by the three — the three carriers that are on the slide.

- Q. Dr. Lee presented some taxi data maps that he had created. Why did these look different than the ones that you made?
- A. Well, Dr. Lee's taxi data provide counts. In other words, how many customers fly -- leave from Manhattan to go to each of the three airports, rather than to share, so

how -- you know, what proportion of them go to Newark, and what proportion of them go to JFK and LaGuardia. Okay? And so the first observation is that it makes sense that a lot of customers go from Manhattan to Newark. A lot of taxis go from -- because there's a lot of people in Manhattan. But the way that he's reported the information hides relevant facts. And that's what I'll explain.

So I want you to -- I think it makes sense to look at the very bottom right of the chart, and this gives the legend. And you can see that if 50,000 -- any zone that generates more than 50,000 rides is going to be what we would call top-coated. Okay? So it gets the deepest shade color, and that's the way this is done. So that could be 50, 60, 70, anything like that. And it's hard to compare across these panels because Dr. Lee chose to put them in different colors, but if you look at each one of them, and you might get the sense that sort of the deepest shade is actually more likely to occur for JFK and LaGuardia than it is for Newark. And in fact, that's the case.

The table that I've added on the top left shows you that in the Newark plot, there's 50 -- 50 taxi zones that are top-coated. And what I mean is that these are zones -- excuse me, there's five zones from Newark. Five zones that go to Newark that are top-coated of that 50,000 thing. So at least 50,000 passengers. Okay? Whereas if you do the same

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calculation for JFK and LaGuardia, 36 of them reach the top level. Okay? Have at least 50,000 passengers.

Now, but now we can think about what does a top-coat do? A top-coat makes it look the same, whether it's 50, or 60, or 70, or 80. Okay? So let's unpack that a little bit. And what I've shown you here is the results for the midtown center taxi zone. It's a taxi zone just south of Central Park, and this is -- this is a zone where all three receive a top-coat in the deepest shade. And you can see that Newark has 59,000, JFK has 115,000, and LaGuardia has 219,000. So all of these received the deepest color. They're observationally equivalent in the figure, even though JFK and LaGuardia count for 85 percent of the rides, and Newark accounts for 15 percent of the rides, and this is why I say it's sort of more helpful to look at just simply the proportion of customers that choose one airport or they -over the other. And that's what I've done and when I report my catchment maps or my analysis of the taxi data and so on.

Q. Dr. Lee criticized the taxi data maps that you created for leaving out some Uber and Lyft data.

What's your response to that?

A. Adding in the Uber and Lyft data doesn't make much of the difference. On the left, I've got the exhibit that's in my report. On the right, I've got an updated exhibit that includes all of the Uber/Lyft data.

- Q. We've heard some testimony from Dr. Brueckner about his academic research with doctors Lee and Singer. What's your opinion on that research?
- A. I don't view Professor Brueckner's method, which I may call BLS, for Brueckner, Lee, Singer, as informative for the purposes of antitrust market definition, and I'll explain why. It starts with a nice concept, okay, and the idea is you see a competitive effect in airlines, so like maybe an entry happens and prices go down ten percent at an airport. Okay. And then for there is another airport that may be nearby, and the idea is that in the data, you see the prices go down five percent. And I think Professor Brueckner is right, that that's he calls that spillover, right? That's evidence of some sort of consumer substitution between these airports, so it's starting in the right spot.

But then the question is, as you compare ten to five, is that economically meaningful in the context of can you exercise market power, and that ends up being a very different, difficult test. We don't have a good economic tool to say that ten is economically meaningfully different than five in the context of the Horizontal Merger Guidelines Hypothetical Monopolist Test. And so this is just a fundamental problem.

Now, the approach of BLS is not to really talk about economics at all, but rather to pivot to statistics

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instead. Okay? But that has consequences. It means that
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     any two airports will be grouped together with insufficient
            And it means that any two airports will be deemed to
     be separate for the purposes of market definition with enough
     data. All right. And I've given sort of a table that's
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     tried to give you a couple of examples of this. So the first
     one is suppose we have an instance where, you know, an entry
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     event happens, and the price of one airport changes by
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     12 percent, and the price of the other airport changes by
     2 percent, because that's what actually happens, okay, And
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     suppose we think that's a meaningful difference, economically
     speaking.
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               MR. WALL: Your Honor, I object to this testimony,
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     it was not provided in his reply report.
               MR. DERITA: Your Honor, he's simply responding to
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     testimony that was presented by Dr. Brueckner in his direct.
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               MR. WALL:
                          That is not an excuse, the way the
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     obligations work because that's why we have reply reports.
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               MR. DERITA: And I believe this was addressed in
     Dr. Miller's reply report.
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               THE COURT: Where?
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               THE WITNESS: I have a section -- I'm sorry.
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               THE COURT: Yeah, you can.
               THE WITNESS: I have a section that responds to
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     this.
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THE COURT: Just what part of this report is this included?

THE WITNESS: It's the reply report on market definition. I can look, I don't know what section of -- but it's the reply report, I've got a section on this and I talk about a number of problems, but the -- I'm highlighting the statistical problem that I discuss in that section.

MR. WALL: I mean, maybe the easiest thing to do is just, as a voir dire question, is the example given here contained within the reply report?

THE WITNESS: I can answer that, too.

THE COURT: Sure. Go ahead.

THE WITNESS: The argument is given. The particular example I'm using to explain the argument to the Court is not in the report.

THE COURT: Overruled. Go ahead.

THE WITNESS: Okay. So where are we? We're on the first row. Okay? So we've got — we've got a setting where there's a 12 percent change and a 2 percent change. Well, suppose that's economically meaningful. All right. If it turns out you just don't have much data, or you only see a couple of these competitive events, then just econometrically speaking, there's not going to be a lot of statistical precision. All right. When you look at sort of the standard of errors that Professor Brueckner was talking about and the

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co-variances he was talking about, the conclusion the BLS will reach is that the statistical precision is insufficient to tell -- to statistically tell the difference between the 2 and the 12, and so these markets get grouped together.

But the second row considers the opposite case. It's one where there's a 2 percent effect on one, and a 3 percent effect of the other. And suppose we think that that's -- that's a very similar effect. And so these two, you know, maybe the evidence suggests they should be in the same market. But then suppose when you do the BLS test, you've got a situation where you've got great data, a lot of entry and exit events, a lot of observations. In that case, you've got a lot of statistical precision. And if there's a lot of statistical precision, then you looking at this, you'd look at the two and the three, and you'd put them in different markets. And this is why I say it's a statistical test and not an economic test. It doesn't provide a framework for thinking about whether there's meaningful economic differences across these two airports. So I don't view it as providing a path forward understanding market boundaries in airlines, or really anywhere else, because it's a general test that could be applied anywhere, but there's very little economic content, and there's -- there's very weak connection to the Hypothetical Monopolist Test.

Q. I'd like to pull up page 19 from Dr. Israel's testimony

on Monday, where he discussed one of his papers analyzing international alliances. And if we can highlight line seven through ten. The text that reads, "The nonstop overlaps are important routes. There has been lower prices and more capacity on those routes. They have benefitted the nonstop overlaps. That's a strong finding in the paper."

Dr. Miller, is that testimony consistent with how Dr. Israel described the paper in his report and with your understanding of the results of that paper?

A. It is inconsistent with the statement of the report and

- A. It is inconsistent with the statement of the report and it is inconsistent with what's in the paper. And for context, this is talking about international alliances and the nonstop overlaps that exist on international alliances.
- Q. In light of Dr. Israel's testimony, are you aware of any literature inconsistent with a strong finding of lower prices and more capacity on nonstop overlaps and international alliances?

MR. WALL: Objection, Your Honor. This is completely outside the scope of Dr. Miller's testimony. I've never --

THE COURT: Can you just repeat the question first and then I'll hear the objection.

MR. DERITA: Sure. In light of Dr. Israel's testimony, are you aware of any literature inconsistent with a strong finding of lower prices and more capacity on nonstop

overlaps and international alliances? And those words were from this transcript.

THE COURT: And what's -- now state the objection?

MR. WALL: Yeah, the objection is this is

completely outside the scope of Dr. Miller's testimony. He

never addressed the effects of international alliances in any
one of his reports. He didn't address it on -- in his first

testimony. And furthermore, this question is an effort to

elicit an answer that would violate an objection that you
sustained during the cross-examination of another witness.

THE COURT: Remind me what that was.

MR. WALL: That was in Dr. Brueckner's examination, when they tried to go outside the scope of Dr. Brueckner's examination to talk about a paper that he wrote on international alliances.

MR. DERITA: Your Honor, Dr. Israel's description at trial differed from the description that was given in his report. This is the first opportunity that Dr. Miller would have to have addressed that inconsistency between the report and what was said at trial.

MR. WALL: There is no inconsistency, first. But second, what they're trying to do doesn't address the inconsistency. It's trying to use a strawman inconsistency that doesn't exist on the face of it. That's exactly what Dr. Israel's paper says.

THE COURT: Sustained.

(Counsel confers.)

BY MR. DERITA:

- Q. Okay. Let's move on. Dr. Israel presented an analysis of the number of competitors on Boston and New York City overlap routes. What's your opinion of that analysis?
- A. Well, this is one of the few instances in which Dr. Israel acknowledges that that competition in particular routes is can matter for outcomes. And I'll get into this in a moment. Like I understand that the way Dr. Israel sees competition is involving sort of these hub—and—spoke systems that legacy carriers put together. And I agree with him that the hub—and—spoke systems can have value for the legacy carriers and for passengers and maybe in particular these what they called the power passengers that are traveling. That makes sense to me and it's just that's part of airline economics. But it's also a narrow view, because there's different business models out there. And different things matter to different passengers.

And one of the things that you see with JetBlue, for example, is that it tends to operate these point-to-point routes. And the business models to compete against the legacy carriers, and bring that sort of, you know, unique combination of quality and low cost in a way that drives prices down and ultimately matters for customers. And so,

you know, when I look at this, I think that we -- one of the important parts of understanding the likely competitive effects of the NEA is how things play out on particular routes where American and JetBlue compete, and I think that that competition, the price competition that creates matters for all the consumers, but it especially matters for the customers in the back of the plane that are cost conscious, that actually fill up the bulk of the seats.

So with that said, let's look at the table itself. And I wanted to -- I just wanted to show a couple of things. The left table is the analysis of New York. And that includes Newark, which is -- it's just what's there. And then the right is an analysis of Boston. And the number I'll start with is the 37 percent that's at the bottom right in the New York table, and I'll just try to -- try to clarify what that number is, because I find it hard to keep in my mind, so I'll try to say it precisely.

We're looking at all the routes that JetBlue and American fly out of New York City. All right? And looking at all of the passengers that fly on those routes, including passengers from United and Delta, anybody else. Okay. So it's anybody who flies on a route, where American or JetBlue provides nonstop service. That's my understanding of the number. And what it tells you is that 37 percent of those customers fly along routes that are not overlaps.

So what's interesting to me is you can flip that around and you can conclude that 63 percent of the customers that fly on routes that American and JetBlue both fly nonstop. And what that tells me is that, in the broader scheme of New York City, there are a lot of routes on which American and JetBlue compete. And this is sort of competition between them on the nonstop overlaps isn't this narrow thing that's a handful of markets, it's a big part of the competition in New York City, and I'm going to come back to this with my own calculation in a moment.

The other thing to note about the table is that Dr. Israel puts — classifies routes according to the number of other nonstop carriers that fly the route. And in his direct, he made assertions along the lines of, you know, if there are enough other carriers, there's unlikely to be a competitive problem. And you know, just as a matter of analysis of a competitive environment, I understand that all else equal, and having another competitor is likely to generate better outcomes for consumers, but simply knowing the number of firms in a market doesn't give you all of the information.

And there's a lot more that we do, that I do in antitrust, that's intended to analyze particular market details that matter. You know, is it the case that one carrier has lower cost or a higher quality product than the

others? You know, might it be the case that two carriers are well positioned to serve the markets and two carried are more peripheral. These sort of things are relevant for looking at at the likely competitive effects of a transaction. And Dr. Israel accepted some of that, at least I think, when he started on cross, sort of accepting that, well, if JetBlue is on the route, it could be a different result, if JetBlue is not on the route, and this sort of thing. And so these details matter, and that's what I tried to analyze in the course of my — in my reports and my testimony.

- Q. Is it possible for consumer harm to result on the route when there are three other carriers resuming -- remaining after a transaction of what's called, usually, five to four?
- A. A five to four merger -- we'll do a merger, just for simplicity. Suppose you go from five to four. And the question is: Can you have competitive harm? And the answer is an unambiguous yes. Okay.

And the way to think — one way to think about this is in terms of the Herfindahl Index. If you have a perfectly symmetrical firms, so all five firms are equal to each other, and you have a merger that takes you down to four firms, then the HHI is going to be at least 2,500. And to benchmark that for you, that's the level that the Horizontal Merger Guidelines say constitutes a highly concentrated market.

So in a setting where there's five and you go to

four, already we're reaching levels of concentration that the merger guidelines suggest are -- are problematic and, you know, the DOJ may, depending on some other things, presume a likelihood of anticompetitive effects.

But that doesn't mean that the harm could be even more than that. For example, in a five to four it could be the case that the loss of competition involves two carriers or two firms that are large in the market, and there's three more that are small. And that might be an indicator that, all else equal, there's a big problem there.

Or it might be a big firm or maybe two small firms are combining. And it is two small firms combining, actually, that's a situation that might go in the other direction. Maybe in a five to four, there's less problem.

But the point is that the details of this matter, and simply saying five to four isn't enough to -- isn't enough to conclude that there's no problem.

- **Q.** What information would you suggest better measures competition?
- A. We developed a number of tools. And I've looked at a number of different analyses in the context of my report, for example, and my testimony. But one of them is actually market shares, because market shares pick up not only whether a firm is present in the market, but also it gives you some notion for the ability to compete, the ability to provide a

product that consumers value.

And that's why I showed, for example, revenue shares in 2019 coming out of Newark. And that's the bottom line, and JFK/LaGuardia for the top rows by American and JetBlue. And I showed you that along these nonstop overlap routes, the market shares are 50 percent, 40 percent, sometimes higher, sometimes a little lower. But these are meaningful market shares.

- Q. How did these market shares compare with the parties' airport level market shares in New York?
- A. Well, this a pie chart from my reply report, And it just shows that, on the left, that American accounts, in 2019, for 22 percent of traffic, domestic traffic, at JFK and LaGuardia, and JetBlue accounts for 19 percent. So they account we know they account for a good chunk of capacity at JFK and LaGuardia.

And now I'm going to bring in that number that Dr. Israel calculated, which suggests that, actually, there's a lot of overlap there between the red and the blue. But here I'm going to update the number. I'm going to give you something different that will focus on JFK and LaGuardia, and that's the comments on the right. What I've calculated is that among the markets with the JFK and LaGuardia endpoint, and this includes nonstop overlaps, mixed overlaps, all the markets with the JFK/LaGuardia endpoint, 57 percent of

American passengers are on these nonstop overlaps coming out of JFK and LaGuardia. And 70 percent of JetBlue passengers are on the nonstop overlaps coming out of JFK and LaGuardia.

And my conclusion from that is that the routes that I showed you on the previous slide which had those market shares, shouldn't be interpreted as just sort of a small set of routes that are inconsequential in the grander scheme of everywhere that JetBlue and American fly out of New York. They account for a lot of the passengers.

Q. What are the Boston route shares?

A. Boston shares are even higher. I show this again. And I think, you know, what -- we can dig in a little bit to one of these, just to tease out the difference between shares and competitor accounts. And, for example, Miami there is a nice example. In Miami, American and JetBlue account for 76 percent of the revenue in 2019. That leaves 24 percent unaccounted for. You know, on this route is -- the third largest competitor is actually Spirit. Delta flies this route, and actually Frontier has something like a one percent market share, as I understand it, on this route. So depending on how you count it, this would be a route that has four nonstop competitors, or maybe five nonstop competitors, if you count Frontier's small share. So it's a setting where there's, you know, four, maybe five competitor accounts, but two of these carriers are doing most of the flying and

capturing most of the revenue.

- Q. And how did the Boston airport level shares look?
- A. This is 2019. Again, the -- showing the defendants' share of domestic traffic at Boston Logan. And American has 19 percent of that traffic, JetBlue has 33 percent of the traffic. JetBlue had 21 percent of the traffic. And so the American and the JetBlue, again, account for a lot of the traffic that comes out of Boston in 2019.

And I've done the same comparison. You know, in markets that have a Boston endpoint, 76 percent of American passengers are on a nonstop overlap, and 28 percent of JetBlue passengers are on a nonstop overlap. And it makes sense that there would be some asymmetry in those numbers because JetBlue just flies more places than American does.

But my conclusion from that is similar to my conclusion with the New York markets, which is that the nonstop overlaps that I focus on and that are the main source of harm in my model, aren't just some isolated routes but they matter in the broader context of Boston.

- Q. The Boston shares that you presented are for 2019. Have American and JetBlue's positions in Boston changed over time?
- A. They have. And this is a line graph that shows passenger shares from 2007. And I'll just trace it through to 2019.

 And I can just characterize a couple patterns pretty fast. I

mean, this is a market that JetBlue entered in 2004. By

2010, JetBlue flew a larger passenger share than anybody else, and its share of passengers increased through 2019, which is evident.

We can also see that Delta Air Lines, which is sort of the purplish line, starts growing around 2013, and increases through to 2019, when they pass American. And we see that American's share is -- actually, they're number two in 2014, and it decreases through 2019.

And you know, my conclusion for this is I observed that JetBlue grew in this market by making its own investments, and I observed that Delta grew in this market by making investments, doing, you know, what's been called in the context of this trial, organic growth. And my takeaway is that really very little about what happens in Boston is inevitable, or at least this table is inconsistent with a narrative that suggests sort of that there's inevitability about the ability of an airline or a carrier to provide service in an airport. Rather, you see these numbers moving around as carriers invest or don't invest in an airport.

- Q. Okay. We're going to switch gears and I'm going to show you a demonstrative that Dr. Israel used to explain his view of the MGIA. What's your take on this slide?
- A. On this slide, Dr. Israel is -- makes an argument that the NEA, together with the MGIA -- remember, the MGIA is the subagreement that does the revenue sharing, is very different

from a merger, and it presents sort of a number of boxes. And unfortunately, I think that, you know, in each of these boxes he gets the economics wrong, so I just want to walk through it quickly and I'm going to start on the right. And the right is the fixed proportion profit sharing. And the question is, is fixed proportion profit sharing different than a merger?

And you know, the reason that Dr. Israel gives, the main reason he gives is that there's no control. You still have two firms that can make decisions with fixed proportion profit sharing, whereas with a merger, that's just -- you know, one firm makes the decision. And it's true that there's a literature that looks at sort of interesting transactions, interesting things like revenue sharing or situations where, you know, one person owns 80 percent of one company and 25 percent of another company, and that creates interesting effects and control can matter, but that same literature shows that if you've got full profit sharing, so, you know, according to fixed proportions, for example, that actually control does not matter. And that should be intuitive, because the incentives are blind.

If JetBlue made the decision, they choose one thing. If American made the decision, they choose the same thing, because profit sharing aligns incentives. And the economics of this, I think, are both intuitive, but they're

also simple to prove. You know, I've given a couple of proofs to show this in the context of my reports and then a declaration that I submitted as a supplemental thing.

So that's the first box.

Now let's go to the next box over. This goes to fixed proportion revenue sharing. And — but revenue sharing creates the same sort of alignment incentives that profit sharing does. It creates the same upward pricing pressure for reasons that I explained on direct. In fact, to the extent that there's a difference is that revenue sharing creates greater incentives to raise price than profit sharing. And I explained to you that that's because when a firm raises price, not only can they recapture revenue, but they also sort of shift the cost of flying the plane, flying the customer to the other carrier. Okay. So there's this extra benefit with revenue sharing. And so both revenue sharing and profit sharing create new incentives for prices that are the incentives that are created by a merger, but revenue sharing, if anything, just does it a little bit more.

So now we can go one box over and we're going to ask -- we're going to examine fixed proportion revenue sharing with different cost structures. And I think Dr. Israel represented potentially three different things here, and I want to try to address all three. The first is that, as I read his testimony -- maybe I won't characterize

what he says, I'll just explain the economics. Upward pricing pressure does not depend on whether firms have the same cost or different cost. Either way, if the costs are the same or they're different, either way, they gain if they can recapture customers, and so the economics doesn't require you to have the same cost. That connection just does not exist, as a matter of the underlying economics.

In this particular context, suppose you thought that JetBlue had a lower cost than American, if it raises price, it is still able to recapture some of those customers with the American product, and all else equal, it creates the upward pricing pressure. So it would be incorrect to say that the logic of a merger incentive doesn't apply with different cost structures. Okay. That's the first observation on this box.

The second observation on this box is that my model does not impose that JetBlue and American or any other carriers have the same cost structure. I allow for firms to have different costs for different qualities. All of that in is in the model. All of that richness is in the model. It's there in the real world. It's there in the model, too. So the model is not some — on this particular dimension, it's not some stripped down thing that misses a lot of the economics.

And then let me go to the third observation, which

is it's possible that one might think that just somehow

JetBlue is immune to these sorts of pricing pressure, so

JetBlue has — sort of has this JetBlue effect and that's,

you know, always going to be there and they don't respond to

incentives. But that's directly contradicted by my analysis

of how JetBlue priced in the wake of the MAX 737 grounding,

in which competition went out of the market, and JetBlue

responded by increasing its price, which, of course, is the

way a profit maximizing firm would respond. And so my

interpretation of that is that JetBlue has incentives and it

outpricing those incentives maximized price.

Okay. Let me go one box to the left. Now, we're in the final box. This incorporates dynamic revenue sharing with expansion incentives. And the question is, does this change the analysis that we've just walked through? And the answer is no. It's an important but subtle economic point. And what the point is is that when you sell a ticket on the plane, you've already scheduled the plane. So you can set a higher price or a lower price, but it doesn't change the capacity you've already set on the market. Okay? Because you've already decided that.

And so because of that, the choice that you've already made for capacity does not dictate the profit maximizing price that you'll set. It's what you call a sunk decision. All right? And if that decision -- in economics,

it's a funny term. If the decision is sunk, then the pricing thing is going to be made taking it's as given that's already happened. And so the fact that the revenue sharing may update over time doesn't change the analysis of pricing incentives and the analysis of upward pricing pressure.

Okay? And so putting all of this together, you know, the figure makes it seem like you go from a merger to something very far away from a merger, but really none of this takes you away from the incentives that are created by a merger.

All of these boxes on the left really should just be sitting over right there with incentives of the merger. And that's what I testified to on my direct and explained in my reports.

Q. So you just talked a lot about pricing, but the title of

- Q. So you just talked a lot about pricing, but the title of Dr. Israel's slide and the footer, I guess you'd call it, discussed capacity. Why did you focus on pricing and not capacity in your run through of this?
- A. Well, I think that the boxes here that Dr. Israel has highlighted are the ones that are relevant for the pricing incentives as I've explained to you.

I also think that the merger -- that the NEA creates merger-like incentives for capacity, not through the MGIA specifically, but through the broader context of the NEA, of which the MGIA is only one component. Because it allows for capacity coordination for the mutual benefit of American and JetBlue.

Dr. Israel presented a formula that he claims proves the 1 MGIA provides incentives to increase capacity. What's your 2 thoughts on that? 4 MR. WALL: Objection, Your Honor. He never responded to that in his reply report. It would be outside 5 the scope of his testimony. 6 7 MR. DERITA: I don't believe the formula was presented in his report, in Dr. Israel's reports. 8 9 MR. WALL: Well, then, I guess we have -- I thought he was talking about the proof that you're referring to. 10 11 MR. DERITA: I'm talking about the slide that was presented at --12 13 Do we have a copy of the slide? 14 THE COURT: Overruled. MR. DERITA: I believe, more generally, Dr. Miller 15 did in his reports reply to the claims that Dr. Israel made 16 regarding --17 18 Oh, sorry, didn't hear you. I'll stop talking. 19 THE COURT: Go ahead. THE WITNESS: So for context, I provided this 20 answer in words in my reports, but I don't have the math in 21 my report. But the important thing is that the MGIA math 22 23 that Dr. Israel presented is misleading and incomplete in important ways that I can explain. So the first is that to 24 understand -- understand that what he's doing, he's focusing 25

on a special case, okay, in which to simplify the model, he ends up putting a route in a particular bucket. So the route that he's focusing on is one where, after expansion, the RESM is below average. And in that setting, the MGIA creates a unilateral incentive for each partner to grow. And by unilateral, I mean, it's sort of one carrier can be better off if it grows, setting aside whether that growth is mutually beneficial.

So the first point is that this is not a general result. It is one that applies for routes that are low RESM routes, short distance. There's less competition with a partner. But the MGIA can also create unilateral incentives to contract along routes that have sufficiently high RESM, that are sufficiently long distance, or have a lot of competition with a partner.

And that's why if you think back to my initial testimony, I characterized it as the MGIA can create unilateral incentive to grow, but it doesn't necessarily do that. Because if you look at the different types of routes as they exist across the NEA airport -- NEA overlaps, some of them are likely to fall in one bucket and others are fall in another bucket, and it's just a complicated thing. That's not super important to understand sort of where Dr. Israel goes with it, just the math is somewhat limited.

The more important observation is that the math is

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not a complete analysis, because it does not consider the
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     partner's cost to funding an unprofitable expansion.
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               So what do I mean by that? The MGIA can create a
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     unilateral --
               MR. WALL: Objection. Outside the scope of his
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     revealed opinions. He never related this to funding before.
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                            I believe that's incorrect.
               MR. DERITA:
     Dr. Miller has made this point in his direct and his report
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     multiple times.
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               MR. WALL: He never put in his reports any
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     analysis --
               THE COURT: If he made the point already, then I
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     don't need it.
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               MR. DERITA: I mean -- okay.
               Just to clarify, when he says "funding," if you
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     remember the blue and the red bars that were presented on
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     direct, funding means what I believe Dr. Miller was
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     discussing in his direct as exploitation and where one
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     airline pays for expansion by the other.
               MR. WALL: This is the point, Your Honor, that in
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     all the disclosure that we have had here about how all of
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     this works, there has never been an effort by Dr. Miller to
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     incorporate into his analysis some funding cost that -- that
     is now just showing up. He's never said this before.
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               MR. DERITA: By "funding cost," it simply means
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that the revenue sharing provisions of the MGIA -- and we
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     walked through all the math in Dr. Miller's direct --
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                            I can say, like, if you walked through
                THE COURT:
     it all in direct, then I have it already.
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               MR. DERITA: Okay.
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     BY MR. DERITA:
          Dr. Miller, did you want to finish explaining the rest of
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     the slide?
                THE COURT: No, I think we can move on.
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     BY MR. DERITA:
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     Q. Let's pull up a diagram from your direct. I just want to
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     quickly touch on it for you to explain what it is.
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     Eventually we're going to get to Dr. Israel's similar but
     different chart.
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               Could you walk through what this chart is?
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                This is the chart that Dr. Israel mischaracterized,
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     but it's related to the conversation that we just didn't
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     have. So I'll try to explain why it's a mischaracterization.
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                The top bar here that I showed -- that I gave you
     on direct shows the best that American and JetBlue can do,
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     and that includes all the capacity changes that they might
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     make that would be in the mutual best interest. Okay. And
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     that's what I mean that capacity coordination can lead to
     merger-like outcomes.
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               Now, Dr. Israel says why would you sign -- he asked
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the question, it's a rhetorical question -- why would you sign the MGIA if you didn't want these unilateral incentives in place? But there's a very sensible answer to that. The MGIA allocates revenues to the partner that's doing more of the heavy lifting for the alliance. The carrier that's incurring higher cost because it is flying more routes gets more revenue, and the MGIA recognizes that and allocates the revenue in accordance to that. So it makes sense. It makes sense.

But the problem with the MGIA is that it also can create unilateral incentives that undermine the collective good. And that's what I illustrated in the -- on the slide here, is that if American departs from what's best for the alliance because of the unilateral incentives created by the MGIA, it may benefit, but reduce joint profitability. And that comes at -- you know, that's essentially what I call exploiting JetBlue. And again, this is because JetBlue funds the growth. These are the unilateral incentives. And the fact that profit goes down here is by definition. Because the top bar is showing the best that American and JetBlue can do.

And if you -- if you recall, I gave you some documents and testimony that suggests that this isn't just sort of theoretical thing. It's something that was actually recognized as a potential outcome of the MGIA. And the

documents that I gave also showed you that capacity coordination was the means to protect against it.

- Q. Okay. Well, let's turn to Dr. Israel's version of this chart. Can you explain the difference between your diagram and his?
- A. I can. I mean, first of all, Dr. Israel's diagram doesn't make sense. Because we start with the best that you can do. Okay. And there may be mutually beneficial profit expansion that happens as the part of the NEA. Like take that as a possibility. That's in the top line. Okay? So how do you get to the bottom lines that Dr. Israel shows? And the only way is by not counting the cost of funding unprofitable expansion. The way you get here —

MR. WALL: Objection. That's -- it's the same point. We just raised earlier. He's never said that.

MR. DERITA: He's said it multiple times, and it's in his report in Section 4.2.

THE COURT: Overruled.

THE WITNESS: The way you can have profit appearing to be better than the best is because Dr. Israel's math, if JetBlue funds expansion from American, he counts the benefit to American but doesn't account the loss to JetBlue of funding it.

And then the flip side applies, too. If American funds JetBlue expansion, he counts the -- that what American

gets, but he doesn't account the loss to JetBlue. So it's sort of like you can do something that loses money, and you can do another thing that loses money, and you add it all up, and actually you've earned money. And it's because of a -- you can say it's sort of a double-counting issue, but it's really sort of a dropping a term. So the math just doesn't add up.

BY MR. DERITA:

- Q. Dr. Israel characterized the MGIA in his testimony as a beneficial contract that incentives growth. Do you believe the NEA and MGIA do that?
- A. I don't think it's as simple as Dr. Israel makes out. You know, what he said is that if a company can sign a contract that commits it to grow, then it makes sense to do that. Well, that's a strong statement. It can be true under particular instances, but there are a lot of other things that matter, including the competitive environment. And in the context of the NEA, including that if JetBlue glows, it cannibalizes some revenue from American and vice versa. So the effect is just not as uniform as Dr. Israel claims.

In Dr. Israel's report, he attempted to show that it works more often than not. And this is the Stackelberg analysis that I mentioned on my direct testimony but didn't get into the details on it. Even within that quantification, the effect goes the other way. It tends to go the other way

on the nonstop overlap routes so that the defendants would find it profitable to reduce capacity on the nonstop overlap routes. And that makes sense, because that's where there's — this competitive incentive becomes very important. All right.

And so this result is actually consistent with my model of pricing competition, the Bertrand model. And it's consistent with the results that obtain from Dr. Israel's model of quantity competition. That's the Cornell model. All of these models show that the NEA is likely to raise price and reduce quantities along nonstop overlaps, and all else equal, that creates an incentive to reduce capacity along those routes.

I mean, at some point it stops being a modeling result, and it's just the right characterization of the economic incentives that come out of the NEA.

- Q. You've mentioned before that a retrospective analysis of the NEA is not informative. Why is that?
- A. I think I gave three reasons. One is that it's hard to interpret business decisions in the shadow of litigation.

 One has to do with it's difficult to tease out causality for things like this, and that's amplified by COVID. And the third is the NEA is in the process of being rolled out during the data that we have available to us.
- Q. So are you saying that you can -- that someone can never

do a meaningful comparison of preNEA -- pre and postNEA prices for retrospective?

A. Well, Professor Carlton suggests that the answer is yes. I'm just not so sure that it's as easy as he makes it out to be. I'm not sure there's going to be a clean, easy way to do a before and after analysis that's going to allow you to reliably allow you or anybody else to reliably determine the competitive effects of the NEA.

And it's not only a matter of COVID. Because you could imagine sort of looking at data from 2019 and comparing it to 2025, for example. But that gap just grew a lot larger. And as the gap grows large, as 2019 recedes to the distance, more and more changes just happen in markets for unrelated reasons and the comparisons get more difficult to draw. And that's sort of why I focused the analysis the way I have, which is to really use a method that isolates the effect of the NEA and focus on that.

- Q. I just want to clarify. I think there was a misunderstanding in the question at the beginning. You said Professor Carlton would -- I believe you said, yes. I think you meant yes, one can be done, and then your explanation was about why you're not so sure; is that right?
- A. I -- maybe I --

THE COURT: You'd have to repeat the question, I think, for any of us to be sure.

THE WITNESS: I think Professor Carlton said it would be easy. I think it might be harder then he makes it out to be for the reasons that...

MR. DERITA: That clarifies it.

BY MR. DERITA:

- Q. So you mentioned data issues that present challenges for a retrospective. Can you provide more color on what those are?
- A. I can. And you know, like all methods have problems and no method is perfect.

Can I go to the previous slide, please? No method is perfect, but what I want to highlight is that COVID-19 sort of amplifies the normal methodological challenge associated with identifying the effect of the NEA and the data that we have available, and I know that there's been a lot of testimony that COVID has mattered for airline markets, but I don't know if we've seen a chart like this exactly. This shows airline traffic out of Boston from 2017 to 2022. And what you just see is the fall in traffic in 2020 as COVID starts hitting. And what I'll point out is that it's not just that traffic went down, it was nearly eliminated in that first quarter. And then it comes back and you can see that the NEA begins to be implemented at the same time the COVID vaccine becomes available. And then some interesting things happen sort of at the end of the sample.

You've got the second dot that seems to be pretty high. That's the first holiday season where folks were traveling for the first time to see their family, and you have this big upsurge, followed by Omicron and a down surge. Now, I don't know if that's exactly why you see that pattern in the data. I've tried to mostly forget all about COVID, but if you actually like think about the experience and work it through, there's all these different things that are just — like moving around the data a lot and the experience of the airlines going through that time period.

- Q. Let's talk about Dr. Carlton's analysis of the NEA. Does his retrospective face the challenges that you mention exist with retrospectives more generally?
- A. Yeah. Professor Carlton, he does face the methodological challenges, and he uses something that's called differences in differences, and he walked you through the logic of it. The idea is you've got some keep control routes and some treated routes. And for this to work, the valid control routes have to respond to nonNEA changes. You know, for example, COVID-19, in the same way that the treatment routes would. I mean, that's what makes them good controls is that they're similar. And the differences in differences, I agree with Professor Carlton, that it's widely used in the literature, but I would add that when we teach it, we teach it far more on the ways it could go wrong, than on simply

just applying it. It has to be carefully implemented, because it can create misleading inferences.

So if you have a valid control group, then the difference between outcomes in the treatment and control gives an estimate of the NEA effect. I mean, that's the logic of it. Here, valid controls may not exist, either for Professor Carlton, or in the future, And I'll give some context for that. On the graph, we have -- I've plotted the average price or -- it's actually the index, so it equals 100 percent in the first quarter of 2019. And you've got that price is the average index for the treated routes in the red and the control routes in blue. And I've shown you the entire preperiod that Professor Carlton uses in this study. Okay.

Now, the treated routes are the Boston nonstop overlaps, and the control groups are other Boston markets where American flies nonstop, or JetBlue flies nonstop, but they're not overlaps, only one of them flies. In fact, the vast majority, all but one of these, are routes where JetBlue flies nonstop. I think there's like a Harrison, Pennsylvania flight that American flies nonstop, but that's the only one in control.

And by the way, we know that there's going to be some differences between the treatment and the control routes, because the routes that -- the routes that American

flies nonstop predominantly go to American hubs. And those are cities that have a particular set of characteristics, whereas the control groups are going to go to cities where JetBlue flies that are not American hubs, and you might expect those to have different characteristics. So let's advance and just see how this plays out as these control groups move into COVID.

The main thing you see straight away in the data is that the treatment and control groups respond differently to COVID-19. The red line on average is a good bit below that blue line, between the onset of COVID-19 and the onset of the NEA.

Now, in this analysis, JetBlue and American, in the airline business, they have different ways to think about which routes are business routes and which routes are more leisure routes. I'm going to classify these routes using a particular JetBlue document that just conveniently does, you know — works through all of these routes. And what that document indicates is something like 80 percent of the treated routes are designated as business, and it makes sense because these are going to American hubs and American picks those hubs for a reason. But only like 60 percent of the control routes are business routes. And that's not a big difference. It's a difference of 20 percentage points. But it's — it's seemingly enough to open up this difference

between the red and the blue lines. Or at least contribute to the difference between the red and the blue lines.

And I pause at that as a potential explanation because it's well known that COVID-19 affected business route ands leisure routes differently, with business routes taking a bigger hit. And that's what you see here, is that the different prices on the treated routes, which are more likely to be business is sort of bigger than the hit on the control routes on the price. Okay?

Can we go forward one slide?

So if we -- if I just take the analysis and do the sort of -- look at changes over time on average, then what -- what I show in my reply report is that the control group diverges from the treatment group during the COVID period, by, on average, around minus 11 percent. In other words, the treatment group goes down by 11 percent relative to the control group. And that happens before the NEA is implemented. All right. These data aren't in Professor Carlton's differences, and the differences which compares sort of the preperiod to the postperiod of the NEA.

But you can see that in Boston, the negative that shows up in Professor Carlton's analysis actually sort of predates the implementation of the NEA. And that's why — that's why on the slide, I've got in that red arrow that the causal interpretation is invalidated. It — you know,

incidentally, this isn't just a matter of COVID. What this is highlighting is that the treatment and control groups are just different from each other. They respond to COVID-19 differently, but they're likely to respond to other changes differently, as well. So looking at the response to COVID-19 is just a way to illustrate this particular setting that there seems to be a discrepancy or a violation of the assumption that you need in differences in differences. So I don't think there's a meaningful interpretation of the regressions that Professor Carlton has put forward.

Now, taking a step back, you know, if the conclusion from this is that looking at the data, it's just hard to isolate the causal effect of the NEA using the information that we've got, then that's an agreement that makes sense to me, and I would just add that -- you know, I -- there are good reasons to think that that would be the case, ex-ante, and that's sort of why I designed the analysis that I did. But if the conclusion from -- you know, if Professor Carlton's testimony is that the regression model allows him to isolate the causal effect of the NEA, and it's either a zero in New York or maybe a zero or a negative in Boston, then that conclusion is incorrect, and it's not supported by the data.

Q. Professor Carlton presented a comparison of your predicted price increases to actual 2021 and 2022 prices.

What's your opinion of that analysis?

- A. I don't think it's particularly helpful. You know, the simulation result is going to predict the effects of the NEA in 2019, holding everything else equal. Comparing that to 2021, 2021 realized data is completely the opposite in that it conflates potential effects with the NEA with a number of factors that the simulation holds constant, including COVID, including changes to the traffic mix, including anything else that changed in the world between 2019 and 2021 or 2022. And so to me, it doesn't strike me as being an informer to the way to assess how the model is performing.
- Q. Some of defendants' experts have critiqued specific aspects of your model. I want to start by talking about marginal costs.

How do you respond to Professor Carlton's criticism to marginal cost in your model?

A. Let me focus at a high level first and then maybe dig in a bit. The distribution of marginal costs looks pretty good. With no adjustments, only 12 percent of the products in the NEA nonstop overlaps are negative. And I testified that there's reasons to expect negatives, because you have this unobserved revenue and fees and other sources, too.

Now, if that's the case, you might expect the ULCCs to be particularly negative, because they get so much money on their fees. And that turns out to be true, that in my

model 72 percent of the ULCC marginal costs are negative. So it's consistent with my interpretation. If you pull out the ULCCs, then only nine percent of the remaining products had the negative marginal cost on the nonstop overlap.

Now, again, there are good reasons to think that a model that is reliable and correct will generate that sort of thing, that sort of prediction in a setting in which there's unobserved revenue opportunities related to fees — "unobserved" meaning not in the data — you know, fees and other profit opportunities of the sort that I've described.

To get a sense for some of this, I looked at Department of Transportation Form 41 data. And this has data at the carrier level -- okay, it's not broken down by route, just sort of for American or for JetBlue. And that has information on some of the fees. So they've got baggage fees and change fees, and we can add that up. Okay. But it doesn't include all the fees. It doesn't have seat fees. Okay? That's the one that I spend the most money on. But just with those fees, the average revenue for American is \$50 per passenger. All right.

And then there's these other things like the seat fees, the loyalty credit cards, and so on, that the model accounts for, but can make a marginal cost appear lower than they might be.

And so again, my interpretation of this is that

overall, the distribution of marginal costs looks good, and the model is performing the way I would expect it to perform.

Q. So as you suggested, let's dig in a little bit. I'm going to show you slide 9 of the demonstratives that Professor Carlton used. And I want to focus on the second line, which is Boston to Charlotte. And if we can highlight the American marginal cost.

Professor Carton called out American's negative \$111 marginal cost in his testimony. What's your response to that?

A. First, let me just clarify that this marginal cost is not adjusted in any way for any of the fees. First observation.

But the second observation is that Boston-Charlotte is a route on which American and JetBlue have a combined market share of 96 percent in 2019, according to revenue. And that's exactly the sort of market where the model is going to predict a high markup.

I think the model with that degree of market share is stressed a little bit. You know, I testified this can happen sometimes. So is the number exactly right? It's hard to say for sure. But on the other hand, this is exactly the sort of market where you'd expect to see a substantial price effect.

And so just looking at the results of the model and how it's performing in Boston and Charlotte, the results that

I obtained here are consistent with my understanding of economics. You're talking about -- you're talking about aligning the pricing incentives to two carriers that collectively had 96 percent market share.

Q. I want to highlight the JetBlue postNEA fare and do the same for Delta and United.

Dr. Carlton had noted that it would be strange for JetBlue to charge higher prices than these two legacy carriers. What is your response to that?

A. Well, I have two thoughts. One is that the NEA aligns the pricing incentives of JetBlue with those of a legacy carrier. It turns its pricing into those of a legacy carrier as it maximizes its own profit. So it's not surprising that you see a price of JetBlue of 781 that's now alining with the price of American.

And as you pointed out, the markups on these products are actually going to be equal to each other on American and JetBlue, and that's metal neutrality playing out in the model.

Now, the comparison to the Delta and United products is, I think, not very informative, because in 2019, the products here and the products that are in the model, these are both connectors, not nonstop competitors. Furthermore, they account for a combined four percent or less of revenue.

- Q. And let's talk about the percentage price change for JetBlue's 153.5. How would you interpret that price change for JetBlue?
- Well, I interpret the model as indicating that on this particular route, there's a large impetus for upward pricing pressure. But this is one of those cases where the price effect is so large that I think it could manifest in other ways. And so one way that it could manifest, it's the Nantucket-New York example that I gave you; it could just be that JetBlue cedes the market to American and allows American to handle the leg between Charlotte and Boston. That's one way that this could play out that actually wouldn't involve 781 postNEA fare by JetBlue.
 - Q. There's been talk about certain Boston routes that are carved out from the NEA. Why did you include those in your analysis of Boston?
 - A. Well, I'm trying to provide useful information. If we included the carve-outs, we get to the 428. If we don't include the carve-outs, there's 224 in Boston, and I show the results both ways.

Now, the -- I think it's unlikely that the carve-outs are going to fully mitigate the loss of competition, and so I have -- let me explain sort of my thinking about this.

The first is that, you know, in the context of a

hub-and-spoke system, the -- the flights have to lineup. So you've got to get passengers from one segment to the other segment just to make all -- to make everything work on a hub-and-spoke system. And in that setting, it seems difficult to actually carve out routes that are, say, Boston -- Boston to Syracuse or to Rochester in a way, because the decisions that you make when you fly your routes and how much you fly are just fundamentally intertwined with the rest of the system. And so the notion that you can kind of somewhat separate it out and not have it be affected by NEA decisions just doesn't seem quite right to me.

The second observation is that the NEA may soften competition between the defendants on these carve-out routes, even in the absence of revenue sharing. And there are a number of reasons to think that, but one of the ones that I've already testified to is the history of — of American sort of acting in the spirit of a partnership or the spirit of partnership of merging in the alliances or agreements that American has had with other carriers.

And then the last observation is just that my understanding is that the carve-outs can be modified or eliminated at the defendants' discretion.

Q. Professor Carlton had noted that your model doesn't reflect repositioning by other airlines to serve nonstop overlaps. What's your response to that?

A. Well, I -- I don't think entry in repositioning are likely to materially ameliorate competitive harm. And that's just consistent with what I see in the documents and the data, and it's consistent with my analysis of the industry.

We observe their sustained profitability differences across markets and, you know, the only way to rationalize that, as I understand it, is if there's barriers to entry and repositioning. Otherwise — otherwise entry in repositioning would just come in and arbitrage away the price differences.

But we see that the JetBlue effect happens, that prices are high for a sustained period of time, until JetBlue comes into the market. And that tells me that we had high prices over a period of time that weren't competed away.

And the econometric analysis that I showed you suggests that routes that have fewer legacy competitors have systematically higher prices than routes that have more legacy competitors. And that's, again, consistent can with these sustained differences.

In the NEA markets in particular, we've got these gate and slot constraints, and those are relevant on their own as hard to get into those markets. But they also amplify an opportunity costs. And we'll take Delta. If you're Delta and you've got a gate already, say, out of JFK, and you're going to switch it, so this sort of arbitrage thing, then

there's a real opportunity cost, because you can't necessarily just add a plane; you've got to move a plane from one market to another. And there's a reason that you've picked that first market. Presumably, it's because that's your preferred market, and you're earning the most money there. So these sort of opportunity costs, especially an accommodation of the gate and slot constraints, gives me a concern about whether the sort of entry or repositioning thing would ameliorate harm.

The other observation is, in this context, there's no obvious replacement for JetBlue. JetBlue is a little bit of unicorn in the space. I mean, it's got high quality; we know that. It's got a low-cost structure; we know that. That allows it to compete aggressively on price but also provides a product that's compelling, that can attract customers away from the legacies. And there's not a lot of other carriers that do that, particularly, I mean -- you know, particularly in the Northeast, but actually, I don't know if even broader than that.

Dr. Israel characterized Delta and maybe even
United as a rapid entrant, and this is sort of an entrant
that might be in a hub. It can just switch routes around.

I'll just observe that in 2019, Delta was already in 23 of
the -- 23 of the 29 NEA nonstop overlap markets, and so I
don't think characterizing it as rapid entrant is really

appropriate, because Delta is already there. And my analysis take that is into account. In fact, Delta gains from the price elevations that we see from the model. Because when the prices go -- as American and JetBlue raise price, customers switch to Delta. Delta can raise its price, too. And it gains a lot of passengers. And so this is actually a really nice thing for Delta. And the model allows Delta to expand in a way that's profit maximizing for it. So the notion that Delta is a rapid entrant to me seems a little bit misquided. But the same is also true for United. United does not have a hub in Boston, JFK, or LaGuardia. It does have a hub in Newark. So if you were to include Newark, the observation would be that it's already in all but one of the nonstop overlaps. So again, United as an entrant doesn't make sense to me in this content. MR. DERITA: So I have about 15 minutes left, or We could push through or take the break. THE COURT: Take the break now. Thanks.

(Court in recess at 11:04 a.m.

and reconvened at 11:16 a.m.)

THE COURT: Go ahead.

MR. DeRITA: Thank you.

BY MR. DeRITA:

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Q. So, Dr. Miller, there's been talk about academic

literature that attempts to look at price effects of recent legacy airline mergers. Do you consider that literature a proper point of comparison for the results of your model?

A. Well, I mean, I think it makes sense to benchmark the model against comparable events to try to have some notion for whether the market -- whether the model is generating predictions that are reasonable.

I have reservations about comparing it to the recent legacy mergers, and the reason is that those mergers were cleared by the enforcement agencies either because there's a low risk of anticompetitive effects — and that would be the case for Delta-Northwest — or because they were cleared by the Department of Justice after remedies that are intended to reduce the effects of anticompetitive effects — and that would be the case United-Continental and US Air-American.

And, you know, this notion that we should take seriously the decision that the enforcement agency made or the remedies that they obtained and sort of -- it's not something that's, like, unique to my viewpoint.

I put two quotes on the board. One is from Dr. Werden, who was the senior economic counsel at DOJ for many years. And he just points out that merger retrospectives, you know, using them to test specific allegations in the vast majority of -- well, I won't read it.

My eyes are tired.

But on the right, in a different context,

Professor Carlton points out that if you're looking to assess
whether mergers have raised price, you know, you're looking
at sort of a selected sample of mergers that have been
cleared, and that that sort of should affect how you
interpret it.

And so I think this is -- is somewhat of a straightforward observation. And it's independent of other just, you know, general methodological challenges that arise with isolating a the competitive effects as they arise in markets.

- Q. There's been some suggestions that your projected route-level price increases are much higher than what's been found in academic literature. How would you respond to that?
- A. Well, keep in mind, the academic literature, you know what it estimates -- and Professor Carlton explains this too -- is it estimates the average effects and -- because, when wee use econometrics, we can use different data points and get an average.

And so -- so what the study is reporting, in any academic study that I know of, is sort of the average effect of something that -- you know, as it plays out in a market.

Okay? And, you know, whereas the model is -- predicts route level.

And so I think, you know, if we're comparing the literature, the right thing to be comparing is the average effect of -- that I've obtained across these -- across the nonstop overlaps to, you know, the average effect that would be obtained in the academic literature.

There is an ability to go route by route, but it's not something that's been done in the literature. I've used an ordinary course study of the JetBlue effect, and that's what I've talked to you about before.

- Q. So you kind of mentioned this, but what studies would allow you to compare route-by-route results of your model?
- A. I've mentioned before I testified that the distribution of price effects that I get in the simulation model are comparable to the distribution of price effects that are obtained from JetBlue's ordinary course analysis of the JetBlue effect.

And just to give you a visual of that, I've interspersed the two with the JetBlue effect in blue and the simulation effect for the different NEA nonstop overlaps in red to show that, indeed, these two are overlapping.

Now, Professor Carlton mentioned that the entry of JetBlue is different than the NEA, and I agree with that. You know, entry of -- our next event is different than a revenue-sharing agreement. But Professor Carlton didn't contest the economics that I laid out that explained why the

price effects are going to be similar across those two.

And on the direct, I sort of walked you through the line of argument that says, you know, the incentives are slightly different; but in general, we're going to get -- you know, either one is reducing -- removing an independent competitor from the market. And so it's a useful benchmarking, and it's a standard benchmarking that's done in this sort of setting.

- Q. Let's turn back to average price increases. Are there any econometrics that you would be able to compare your average price increases from your model to?
- A. There are. I've put four on this chart, and these are the four that I think provide the best benchmarking of average effects. The average effect of my simulation result is 9 percent.

On the left in the light blue, we have the defendants' advocacy work that attempts to estimate the average effect of JetBlue competition in markets, and that comes in around 20 percent.

And then we have the two econometric studies that I provided, one of which, the higher bar, around 13 to 15 percent, is the effect of an additional legacy competitor on a route; and then the somewhat lower bar is the effect of, you know, the reduction of competition from American with the 737 MAX grounding that led JetBlue to raise price.

And so, again, and across these different benchmarks, the simulation model, on average, appears reasonable.

- **Q.** How does your average predicted price increase compare to the academic literature looking at prior airline mergers?
- A. I have reservations about looking at many of these mergers for reasons that I laid out; but if you put them in, there, you get a distribution with some above and some below. And these are individual mergers.

So, for example, the Peters paper that was discussed at considerable length looks at five mergers; and there's five different dark blue lines for that. You can see the Carlton results for the three legacy mergers over on the right. But, you know, interpreted in overall here, the simulation results I get, again, are somewhat in the middle here.

- Q. So, Dr. Miller, just to wrap up what are the key takeaways from your testimony?
- A. I mean, I think the most important thing is that the NEA effectively ends competition between American and JetBlue on routes that touch NEA airports, and it does that because it aligns the pricing incentives, and it allows them to make capacity decisions that are in their mutual joint interest. And that's what I mean by effectively ends competition on these airports.

And so -- and so then the economic question because, you know, what does it mean for consumers to have a competition end between these two, between these two competitors? And that's where I've done a fair amount of work that shows that competition matters in these markets. It leads to lower prices.

I've analyzed the revenue-sharing terms that are in the MGIA and the NEA, and I, you know, analyzed those in the context of the markets on which JetBlue and American compete. And I show that the incentives are aligned. It creates incentives for price increases. It potentially puts the JetBlue effect at risk as JetBlue's incentives changed.

You know, I've quantified this in the particular context of the Bertrand model and obtained harm of 696 million. What I've tried to explain in the model is, you know, this is really just about what the implication of a loss of competition is. And it's not an effect that's peculiar to this — this specific model, because I obtained similar, even larger effects with other models. And so it's just an illustration of, you know, why competition matters, and here it's a big effect.

And so, ultimately, that's my opinion and that I reach in my analysis.

MR. DeRITA: Thank you, Dr. Miller.

Your Honor, I'll pass the witness.

THE COURT: All right. Cross-examination.

MR. WALL: Yes, Your Honor. Thank you.

CROSS-EXAMINATION BY COUNSEL FOR AMERICAN AIRLINES

4 BY MR. WALL:

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- 5 Q. Good morning, Dr. Miller.
- A. Good morning.
- 7 Q. At 10:56 a.m. this morning, you said that the Northeast
- 8 Alliance turns JetBlue's pricing incentives into those of a
- 9 legacy carrier. Are you willing to have Judge Sorokin
- 10 evaluate your credibility on this case based on that
- 11 assertion?
- 12 **A.** Yes.
- Q. Okay. Great. You began by talking about -- by putting
- 14 up a slide, slide 4.
- MR. WALL: If we can put that up from his -- not --
- no. Put up his original, sorry, slide 4.
- 17 BY MR. WALL:
- 18 Q. That is talking about how the NEA leads to significant
- 19 harm for Boston passengers. And you -- you have your bar up
- there that goes in dark blue up to \$428 million. Do you see
- 21 that?
- 22 **A.** Yes, I do.
- 23 Q. I've broken that bar down in a -- in some something we
- 24 put together while you were testifying to distinguish between
- 25 the carve-out routes and the noncarve-out routes. And as you

- can see here, the estimated harm for the Boston passengers drops from 428 to 225 million, correct?
- A. I provided this in the report.
 - Q. Is that correct, sir?

- A. I don't remember, but I could look at -- it's
 qualitatively right that the carve-out -- without the
 carve-out routes, you would be in that ballpark. I just
 don't know if the number is exactly the number that was on my
 exhibit.
- Q. Okay. So 203 million out of the estimated \$428 million in harm comes from routes on which the parties are not sharing revenue and they are not coordinating capacity, correct?
- 14 A. That is correct.
- Q. And that is notwithstanding the fact that these are the results of a merger simulation model that depends on there being revenue sharing and capacity coordination, correct?
- A. I would clarify that it's not a merger simulation model,
 but a simulation of the NEA. But the model does implement
 revenue sharing along those routes.
- Q. Okay. So -- so the mechanism that leads to the harm under your simulation model is not actually present on the Boston carve-out rights -- routes, correct?
- 24 A. The particular mechanism is not.
- Q. Okay. Well, there's no other mechanism that's working in

- your model, right?
- 2 A. That is the mechanism in the model.
- 3 Q. Okay. All right. Let's -- let's talk briefly about the
- 4 issue of market definition. So let's pull up slide 6 from
- 5 your original -- from your slide deck today. And you have
- 6 this -- this line here that says the horizontal merger
- 7 guidelines pose a simple question. Do you remember this one?
- 8 A. Yes, I do.
- 9 Q. It's not the only question that the horizontal merger
- 10 guidelines pose with respect to market definition, however,
- 11 is it?

- 12 A. Well, I think this is just a description of the
- hypothetical monopolist test, so I take it as the one that's
- 14 the most relevant.
- 15 Q. Okay. Well, let's -- again, we put this together while
- you were testifying. This one talks about another part of
- the market definition section of the horizontal merger
- 18 quidelines, which makes a simple point that, "When the
- 19 geographic market is defined based upon supplier locations,
- sales made by suppliers located in the geographic market are
- 21 counted, regardless of the location of the customer making
- 22 the purchase."
- You recall we discussed that principle when you
- 24 testified previously, right?
- 25 A. Yeah. My model does this.

- Q. Okay. In fact, when you saw this principle during your testimony when you were here last time, you were surprised that this principle existed, were you not?
 - A. No, I disagree.

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- Q. You didn't even know about it until I raised it in cross-examination, did you?
- 7 A. That's incorrect.
- Q. Let's look at the circle principle that you have -- of -talked about in your examination. What is the closest
 substitute to a nonstop flight to JFK airport in New York
 City from Los Angeles International Airport, or LAX?
- 12 A. Most often, it's another nonstop at JFK.
- 13 Q. And after that, what is the next closest substitute?
 - A. That's not something that I've quantified.
- Q. You don't know that it is a nonstop flight to Newark?
- A. No economist has quantified that in the context of this -- of this trial, to my understanding.
 - Q. Okay. So let's get this. All right. Is it your testimony that, after two years of work on this case, you don't have an opinion as to whether the next closest substitute to a nonstop flight between Los Angeles and JFK is a nonstop flight between Los Angeles and Newark? Yes or no?
- A. I'm just trying to -- I know my answer, except I'm trying to remember the question.
- Is it my testimony that I don't know? The answer

- 1 is yes, I believe.
- 2 Q. You don't -- you don't have an opinion on that?
- 3 A. I don't have an opinion on whether -- I haven't examined
- 4 quantitatively whether a nonstop flight from Newark is a
- 5 closer substitute than a connect out of LaGuardia.
- 6 Q. That's not what the question was, sir. I said do you
- 7 have an opinion or not whether the next closest substitute to
- 8 the JFK service between New York and Los Angeles is the
- 9 Newark service between New York and Los Angeles, yes or no?
- 10 A. As a general matter, it's a hard question because
- conditions are going to vary across routes. There might be
- instances in which there's a good answer and a clear answer.
- 13 As a general matter, I don't have a good answer. I don't
- 14 know.
- 15 Q. Okay. You made some comments about Professor Brueckner's
- 16 testimony. Could you remind us again of the citation to your
- published article on airline market definition? You don't
- 18 have an article -- a published article on airline market
- 19 definition, do you?
- 20 A. No. I haven't written on the subject in my academic
- 21 work.
- 22 Q. Professor Brueckner has, correct?
- 23 A. Yes, he does have an article on it.
- 24 Q. His article is entitled "City-Pairs Versus Airport-Pairs:
- 25 A Market-Definition Methodology For the Airline Industry,"

correct?

- 2 A. I will take that as true.
- Q. Okay. And for all you quarrel with the methodology, you
- 4 agree, do you not, that the updated results of his
- 5 methodology indicate that Newark, LaGuardia, and JFK should
- 6 be grouped together in one market? Correct?
- 7 A. I agree with -- I disagree with the term "should" in that
- 8 context. I agree that that's the result of the test as -- as
- 9 it's been implemented by Professor Brueckner.
- 10 Q. Well, in fact, that's true even after the modifications
- to the methodology that you made and reported on in your
- 12 reply report, correct?
- 13 A. That's correct.
- 14 Q. And you showed that, for eight of nine different
- specifications, the methodology by Drs. Brueckner, Lee, and
- 16 Singer would indicate a three-airport grouping, correct?
- 17 A. I don't remember the details. It's not particularly
- 18 informative.
- 19 Q. Okay. And at the end of the day, you keep coming back to
- 20 the hypothetical monopolist test, right?
- 21 A. That is the way I think about markets.
- 22 Q. Right. But every combination of New York City
- 23 airports -- one airport, two airports, three airports --
- passes the hypothetical monopolist test, correct?
- 25 A. That's not something that I've looked into, but I think

- 1 my groupings make sense.
- Q. Well, you are aware that -- that Dr. Israel established that LaGuardia alone would pass the hypothetical monopolist
- 4 test, correct?
- 5 A. Yes. I believe he submitted that as -- yes.
- Q. And you acknowledged in your prior testimony that the three-airport cohort would pass the hypothetical monopolist test, correct?
- 9 A. Specifically in the context of JFK to Phoenix, I believe.
- 10 Is -- could you clarify your question?
- 11 Q. Sir, you -- you brought this up at your deposition to
- tell me that the three-airport cohort would pass the
- 13 hypothetical monopolist test, right?
- 14 **A.** Yes.
- Q. Okay. So there's no doubt that it does, right?
- 16 **A.** Yes.
- Q. Okay. Okay. Now, let's pull up your slide -- I'm not quite sure the number here. Sorry. It's on importance.
- 19 It's Number 5.
- Okay. You put this slide up to say defendants make
 a big deal out of Newark, but its treatment has a relatively
- 22 small effect on total harm. And in this comparison, what
- you're comparing is the -- the difference in the estimated
- harm with or without Newark to your total estimate of harm,
- 25 including Boston, right?

A. Yes.

- Q. The market definition issue about New York is irrelevant to Boston, right?
- 4 A. That's true except for one route.
- Q. Right. And the approximately \$70 million change in the estimated harm is out of about 200 million in estimated
- 7 New York City harm, right?
- A. I don't know what it's out of. It's -- 70 million is
 70 million, so we can -- you can put it -- compare that to
- whatever you want, but that's the number.
- 11 Q. Dr. Miller, are you saying you took the time to compare
- it to the combination of New York and Boston, and you don't
- know what it compares to the -- New York itself?
- 14 A. No, that's not what I'm saying.
- 15 Q. Well, do you?
- 16 A. New York is, you know, somewhere -- it's about roughly --
- 17 yes. The answer is yes, I do know.
- 18 Q. And what is it?
- 19 A. It's roughly 30 percent of the harm in -- out of the
- New York City markets. I believe I should -- I should check
- 21 that, but it's -- the numbers are -- I think I gave numbers
- on the testimony that breaks out harm between New York and
- Boston. And so we can compare the 70 million against the
- 24 numbers that I gave --
- 25 **Q.** Okay.

A. -- on direct testimony.

- 2 Q. And the reality is, while you criticize defendants for
- making a big deal out of this, if you include Newark and
- 4 United and the other airlines that are flying from Newark in
- the relevant markets, your own methodology is estimating
- 6 price increases on 14 of 18 New York City routes at less than
- 5 percent before taking into account any benefits or downward
- 8 pricing pressure, correct?
- 9 A. Could you clarify what you mean by "price effect"? Is
- 10 this the price effect on JFK -- excuse me -- on American and
- 11 JetBlue, or is this the price effect across all --
- 12 Q. All products.
- A. Oh. Well, that is not particularly relevant. I don't
- have a particular memory of that result.
- Q. Your -- you just said, like out loud, that your estimated
- price increase for all products in the relevant market is not
- 17 relevant?
- 18 A. Two distinctions. One is I don't think it's the relevant
- market; and the second, if you would like me to explain what
- I mean by that context, I'd be happy to.
- 21 Q. That's fine. If your counsel wants to ask you about it,
- 22 they will.
- So you made another point criticizing Dr. Israel
- 24 for not having -- conducting a full competitive analysis of
- 25 the various nonstop overlap routes that are affected by the

- NEA. But let's be clear -- what your competitive analysis
 has been is to treat them like a merger, to sum up the market
 shares, to square them, and then to apply them against the
 quidelines for presumptive illegality of mergers, right?
 - A. That's an incomplete characterization of how I developed the evidence.
 - Q. That is a correct statement of part of your analysis, correct?
 - MR. DeRITA: Objection. He just testified that this is mischaracterizing what he did.
- 11 THE COURT: Overruled.
- 12 THE WITNESS: That is part of what I do.
- 13 BY MR. WALL:

- Q. Okay. And, in fact, you do not undertake and report any route-level analysis of competitive conditions, entry conditions, or possibility of expansion by other carriers for any of the nonstop overlap routes, do you, sir?
- A. I think I provide a number of competitive characteristics across all the routes.
- 20 Q. I said route by route, sir.
 - A. Exactly. Route by route, the appendices of my report, I included a number of statistics on prices and quantities and shares, route by route. Not only for the nonstop overlaps, but I think the information is there, as well, for the mixed overlaps and the connect overlaps.

- 1 Q. But, for example, on this question, you went out of your
- way to make a point that it wouldn't be proper to think of
- 3 United or Delta on these routes as rapid entrants, because
- they're already on the -- the routes. Do you recall that?
- 5 A. Yeah. Delta in particular is -- competes on many of
- 6 these routes.
- 7 Q. Right. So with respect to Delta, we don't have to worry
- 8 about entry. They're already there, right?
- 9 A. I don't understand the context of the question.
- 10 Q. Well, there's --
- 11 A. Entry remains relevant.
- 12 Q. Of course it does, but we don't have to worry that Delta
- enters a route that it's already on, do we, sir?
- 14 A. I don't know the context of the question. I -- it's
- relevant that Delta competes on the routes, and my analysis
- 16 takes that into account.
- 17 Q. Right. Once someone is already there, the antitrust
- analysis turns to the question of whether there are barriers
- 19 to expansion rather than barriers to entry, correct?
- 20 A. There are cases where expansion can be profitable and the
- 21 model includes some of that.
- 22 Q. I didn't ask you about anything about your model, sir.
- In the antitrust analysis, with respect to firms that are
- already in the relevant market, a question we ask is whether
- 25 there are barriers to expansion, yes or no?

A. That can be relevant.

- 2 Q. Okay. And you have not conducted any route-level
- analysis of barriers to expansion by United, Delta, or any
- 4 other carriers in this case, have you, sir?
- 5 A. I would disagree with that.
- 6 Q. Where -- where do I find it? Pull it up in your report.
- 7 A. You could actually put a demonstrative on the slide where
- 8 I do entry and repositioning here on direct.
- 9 Q. Route level?
- 10 A. All of the routes --
- 11 Q. No, at route level, sir. Not anything that's combined in
- 12 the aggregates.
- 13 A. If you would like me to try to explain, I could.
- 14 Q. I want you to tell me whether you did a route level
- 15 analysis --
- 16 A. I've already explained that the answer is yes, as I
- interpreted, and I can explain if you wish, but if you don't
- want me to explain, I can just move on.
- 19 Q. Which demonstrative are you wanting to put up?
- 20 **A.** The entry and repositioning.
- 21 **Q.** From today?
- 22 **A.** Yes.
- 23 MR. WALL: Do we know which slide that is?
- 24 MR. DeRITA: 37.
- 25 MR. WALL: 37?

Can you put slide 37 up? 1 THE WITNESS: Every single -- do you want me to 2 3 answer now? BY MR. WALL: Q. Yeah, go ahead. 5 A. Every single one of the routes involved flies out of an airport that is, in the case of Boston, gate constrained or 7 slot constrained. And so any sort of repositioning involving moving flights or increasing the number of flight creates an 9 opportunity cost that, all else equal, is going to make --10 11 there's going to be -- trade that off against any repositioning. That's one of the reasons I think 12 13 repositioning is unlikely here. 14 And I cannot say that this is route by route because it applies to all of the routes in the analysis, 15 every single one of them. 16 Okay. So let's just go ahead and run with this. I 17 mean -- so let's say, first of all, for the record, slide 37 18 19 of your demonstrative here is your route-level analysis of -of repositioning and barriers to expansion by existing 20 carriers, right? That's what we got? 21 It covers all of the routes. 22 23 Okay. And what you're saying here is you don't think 0. that, for example, if JetBlue and American were trying to 24

reduce capacity and raise prices on the Boston-to-DCA route,

- that Delta, which currently is running eight times a day with
 small regional jets, wouldn't and couldn't upgauge in order
 to try to compete away that attempted exercise in market
 power? That's your opinion?
 - A. They might do some of that.

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Q. Okay. Great. Let's move on, then.

Now, when you were talking about Dr. Israel's discussion of the MGIA, did I hear you say that you thought he was addressing a special case where capacity lowers RESM?

- 10 **A.** No. That would be an incorrect characterization of my statement.
- Q. So if you used the phrase "special case where capacity lowers RESM," you misspoke?
- A. I could -- if there's a question about -- maybe if you put my testimony on the screen, I could clarify --
- Q. I'm afraid I'm not going to be able to do that, sir. But let me just -- let's just get it out here.

Are you contesting that in airline economics, the normal case is that RESM will go down when capacity is added to a market?

- A. All else equal, that would be the effect we obtained to some degree.
- Q. Great. Let's move on. And let's -- let's talk about your -- your simulation.

So just to remind everybody, when you were here

- 1 last time, you testified that, for the nonstop overlap
- 2 routes, the simulation you run produces results that are,
- quote, "almost identical to a full merger," end quote,
- 4 correct?
- 5 A. Could you -- I don't recall the details of my statements,
- 6 so --
- 7 Q. You had it on a slide --
- 8 **A.** Oh, okay.
- 9 Q. -- where you broke the --
- 10 A. Could you put the slide on the screen?
- 11 Q. No, sir. I'm not going to take the time to do that. Do
- 12 you have a problem accepting --
- 13 **A.** So --
- 14 Q. -- the proposition that you are predicting adverse
- effects for the nonstop overlap routes that are almost
- identical to a full merger between American and JetBlue?
- 17 A. A full merger -- I think that that is -- the results that
- 18 I'm obtaining in the model, particularly for the nonstop
- overlaps where almost all the traffic is in scope, would be
- 20 similar to the results that would obtain under an alternative
- 21 model in which there's full profit sharing in the model.
- 22 Q. Okay. For the record, you testified -- you put up a
- slide that had the quote that I mentioned, but we'll move on.
- 24 **A.** Okay.
- 25 Q. So that simulation models the upward pricing pressure of

- a unilateral effects merger without regard to any downward 1 pricing pressure or consumer benefits, right? 2
- 3 To clarify, it's the upward pricing pressure of the NEA, but the model does not incorporate any possible efficiencies 4 that would be relevant. It quantifies the anticompetitive 5
- The upward pricing pressure is -- is the same recapture 7 effect, as you described it, that we use in analyzing 8 unilateral products mergers, unilateral effects mergers, 9 correct?
- Often it -- often UPP -- often that's the case. 11
- So your simulation model doesn't take into account 12
- and model any output expansion facilitated by the NEA, 13
- 14 correct?

side of the effect.

- That is correct. It holds capacities fixed. 15 Α.
- Q. Okay. So let's put up DX-1087, which was presented in 16
- Mr. Znotins's testimony the other day. You're familiar with 17
- this? 18
- 19 You know, actually, I haven't seen this before.
- Okay. Well, I'll represent to you that this is a list 20
- that Mr. Znotins sponsored of new New York City routes since 21
- the implementation of the NEA. Can you accept that for me 22
- 23 for purposes of the question?
- Α. Yes. 24
- Now, assuming that this is all true, your model will not 25 Q.

- take into account any capacity expansion that is attendant to these new New York City routes, correct?
- A. That's correct.
- Q. Okay. And if we go to the next one, it's the same slide for Boston. You'd give me the same answer, correct?
- A. Yes.
- Q. Okay. There's been testimony in this case about
 approximately 30 aircraft that JetBlue is adding to its fleet
 because of the NEA. Assuming that testimony is true, the
 capacity effects of that would not be reflected in your model
 in any way, shape, or form, would it?
- 12 **A.** Excuse me. I have to hiccup or something.

 13 That's correct.
- Q. Okay. If Robert Isom, Vasu Raja, and Brian Znotins are correct when they testified that the NEA will justify additional investment in American Airlines' fleet, the benefits of that are not going to be reflected in the results of your model, correct?
- 19 A. That's right, for the same reason.
- Q. Your simulation results do not take into account increased customer utility from more frequencies or better schedules facilitated by the NEA, correct?
- 23 **A.** That is true. I think those effects are highly ambiguous.
- Q. But that is -- even though -- in your nested logit model,

- you assumed that consumers put a valuation on the number of frequencies offered by a carrier and its partners per quarter on the routes in question, correct?
- A. Yes. Consumers benefit from frequency in the context of the model.
- Q. Right. And, in fact, Dr. Israel put forth an analysis in his report showing that the frequency benefits alone implied by your model were greater than your estimates of harm, correct?
- 10 A. He didn't testify to that.
- 11 Q. It's in his report, is it not, sir?
- 12 A. It is in his report.
- 13 Q. And the reports are now in evidence.
- MR. DeRITA: Objection.
- THE COURT: He may not know. Sustained as to that question.
- MR. WALL: Okay.
- 18 BY MR. WALL:
- Q. But you did not reduce your estimates of harm that you reported that lead to \$696 million figure by so much as a penny to account for the consumer value of greater frequencies, did you?
- 23 A. That's right. I can explain.
- Q. Excuse me, sir. That's -- you've answered the question.
- We can move on.

You heard Mr. Schweinzger's testimony about the improvement in American and JetBlue's QSI scores since the NEA went into effect, right?

- A. I don't recall that.
- 5 Q. Do you know what QSI is?
- A. I think we talked about this on cross last time.
- 7 **Q.** Okay.

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- 8 A. Quality score index?
- 9 Q. Yes. Quality of service index. Close enough.

Let's put up a slide from Mr. Schweinzger's
demonstratives. It was slide 12. Have you seen that before?

- 12 A. No, I have not.
- Q. Okay. In all events, your simulation would not take into effect or model the parties' improved QSI, would it, sir?
- 15 A. I don't know what that means.
- Q. Okay. In fact, in your estimates of harm, there's no reflection whatsoever of the consumer benefits of the new international flying facilitated by the NEA, is there?
- A. In the model, the model focuses on domestic traffic; therefore, it does not incorporate changes for good or bad on
- 21 international routes.
- Q. Okay. Let's bring back Defendants' Exhibit 238. And this has some redactions, so we'll be publishing the redacted version.
- 25 Are you familiar with this document that Delta

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prepared on the New York City 2021 competitive landscape?
1
          I've read a lot of documents. I may have read this one
 2
     as well. I don't remember it specifically.
     Q. Well, let's put up page 2 of the document, and perhaps
 4
     this -- this will refresh your recollection. This is -- this
 5
     is the document in which Delta says that the NEA is creating
     one relevant competitor out of two weak ones. Do you recall
 7
     that one?
               MR. DeRITA: If I may, we don't have a binder of
 9
     these documents.
10
11
               Do you have copies?
               MR. WALL: Sorry.
12
               THE WITNESS: This document says -- wait. Is there
13
14
     a question, or should I wait here?
               MR. WALL: Just wait.
15
               Take that down.
16
     BY MR. WALL:
17
     Q. Okay. So -- oops. Excuse me.
18
19
               All right. Let me direct your attention to
     something that -- a line that says "AA partnership emboldens
20
     B6 to add new business spokes to its JFK/LaGuardia portfolio
21
     and to accelerate growth in EWR to 85 plus departures."
22
23
               Do you see that?
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Okay. Now, if Delta's assessment's correct, that ought

Yes, I do.

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Q.

- to create consumer benefits, right?
- 2 A. I don't know the particular context that this is
- discussing. For example, if this is just about swapping
- 4 JetBlue planes for -- or swapping JetBlue planes for American
- 5 planes in LaGuardia, some of that -- it's hard to analyze
- 6 without knowing more about --
- 7 Q. Forget netting for a moment. Just --
- 8 A. Excuse me?

- 9 Q. Forget trying to net them by something else that I'm not
- asking you about. If I just ask you to assume that the NEA
- emboldens JetBlue to add new business spokes to its
- 12 JFK/LaGuardia portfolio and to accelerate growth in Newark,
- that should create consumer benefits, correct?
- 14 A. Well, I think the net is important here.
- 15 Q. No, I didn't ask you about the net. If your counsel
- wants to ask you about the net, they will.
- That should create consumer benefits, correct?
- 18 A. It's complicated.
- 19 Q. Regardless whether it -- whether it creates consumer
- 20 benefits or net consumer benefits, neither is going to be
- 21 reflected in your model, correct?
- 22 A. The model holds capacity fixed, and so the capacity
- changes are not in the model.
- 24 Q. Right. So the answer to my question was yes. Right?
- 25 **A.** Yes.

- Q. Okay. Now, let me -- look at our line on page 4 of the document. It says, "AA will transfer underutilized slots to constrained B6, realigning partnership capacity to each carrier's strengths and facilitating B6 growth beyond 2019 levels."
 - Now, if that has an effect on capacity, that won't be reflected in your model either, correct?
 - A. If it has an effect, it's not in the model.
- 9 **Q.** Okay. The last time we were here, we discussed how you had come to testify after two years of work without any
- evidence of actual harm from the NEA. Are you still in that
- position as you testify today?
- 13 A. I think there's harm. There's lots of evidence that the
- 14 NEA creates harm.

- Q. Okay. Let's go through it. Can you identify for me what
- you believe is the most significant single case of actual
- harm that has been created by the NEA?
- 18 A. Well, this is a different question now --
- 19 **Q.** The --
- 20 **A.** -- increased in particular markets. I've not sought to show that.
- Q. Let me just -- I'll say it again. Can you identify for me what you believe is the most significant single case of
- actual harm to date created by the NEA?
- 25 A. No. I won't identify that. Is that the question, is

will I?

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- 2 Q. Yes. Can you?
- 3 **A.** No. Can I?
- 4 Q. It's a challenge, sir. Are you able to do that?
- A. I don't believe that we can isolate the causal effect of the NEA in the data as we've seen it.
- Q. Okay. Now, you mentioned before that you think that the reasons for that are COVID-19, litigation risk, and partial implementation; but let's just kind of go through those. For all you criticize Dr. Carlton, you didn't even try to work with the postimplementation data to see if you could come up with control groups that would adequately isolate the fare effects of the NEA, did you?
 - A. First of all, a clarification, the problem is on the second one, it's not simply COVID, but it's that COVID amplifies the normal methodological problems that are associated with teasing out causality of events like this.
 - Q. Terrific. Back to my question. You never even tried in the course of your two years of study to come up with control groups that would adequately isolate the fare effects of the NEA, did you?
- 22 A. That's correct.
- Q. Okay. So you brought up this point about the distinction between business and leisure passengers, but you didn't try to come up with different business or leisure passenger

- 1 control groups to see if that made a difference, did you?
- 2 A. That's true. I didn't try to do that.
- Q. Okay.
- 4 MR. WALL: Can we put up his slide 31, please.
- 5 BY MR. WALL:
- Q. Now, in this slide, you went into an explanation about how the -- there's a pretty significant divergence between the blue line and the red line in the period of 2020, right?
- 9 A. Yes, I did.
- Q. Okay. And Professor Carlton doesn't use 2020 in his difference-in-difference regressions, correct?
- 12 A. In the baseline specification, it is not included.
- Q. Okay. Right. He runs -- he runs a test where he
- includes it to see if it makes any difference, but in the
- baseline specification, it's not there, right?
- 16 A. It's -- that test doesn't conclude -- you can't reach
- that conclusion from the -- his test. It's an inappropriate
- 18 test.
- 19 Q. Okay. In all events here, by approximately January or
- February 2021, the red and blue lines are back together,
- 21 right?
- 22 **A.** Yes.
- Q. Do you have data after February or January 2021 to show
- us whether they moved together after that?
- 25 A. Data are available.

- Q. You just decided not to report them?
- 2 A. It wasn't relevant for the point I'm making.
- 3 **Q.** Okay.

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- A. I know roughly what they look like, and I could explain that to you like.
- Q. Sir, so are you prepared to testify here today that
 analyzing data from 2022 or 2023 won't permit a reasonable
 difference-in-difference analysis of the fare effects of the
 NEA?
- A. I think there's -- we don't know the answer to that,

 first of all. But second of all, I don't think it's going to

 be pretty -- it's not going to be easy to do, and that's how

 I testified.
 - Q. Okay. So -- so that's what I thought. So are, then -- is the point of your testimony is that -- that you're asking Judge Sorokin to find that there's -- that there's nothing an economist can do now and probably nothing that an economist can do in the future to determine whether the NEA is harming consumers?
 - A. No, I disagree with that. I could explain why.
- Q. Well, if we go back to your slide -- actually, go to the
 next -- I think it's maybe -- slide 30 -- at the bottom left,
 what you say is, "valid controls may not exist for
 Professor Carlton, or in the future."
- I mean, doesn't that mean that you're suggesting

that -- that it may never be possible to tell, from an econometric analysis of fares, whether the NEA harms consumers?

- A. That's a more precise question than your first question. And I do have concerns about whether there will exist this claim, before and after, that would allow for an econometric analysis to examine the effect of the NEA on prices or other outcomes.
- Q. So am I correct, then, that what you're fundamentally suggesting by your testimony is we should stop the NEA in its tracks, terminating its consumer benefits, based upon your simulation, because we may never be able to tell whether it harms consumers?

MR. DeRITA: Objection. That mischaracterizes Dr. Miller's testimony.

MR. WALL: He's there.

THE COURT: Overruled.

THE WITNESS: I don't make recommendations. I just analyze the economics. In this particular instance, I've created -- I've presented a number of evidence -- sources of evidence that illustrate that competition matters and that the NEA aligns the incentives of JetBlue and American.

And the way the economics tells us that plays out in the market is often not so favorable for consumers. So that's the foundation of -- that's the economic analysis, as

- 1 I see it.
- 2 BY MR. WALL:
- 3 Q. Well, let me go back at this from another perspective.
- 4 Are you saying that, in almost the 20 months that the NEA
- 5 partners from -- that the NEA has been in effect, American
- and JetBlue have not taken any action, potentially
- 7 anticompetitive, that can be evaluated for actual adverse
- 8 effects?
- 9 A. I don't know the answer to that question.
- 10 Q. Well, let me give you an example. We've heard a lot in
- this case about the decision to have American stop flying its
- metal on Boston-LaGuardia. Do you recall that one?
- 13 A. Not specifically. Oh, I do -- I've -- I remember the
- 14 contours of it.
- Q. Okay. Are you aware that the Department of Justice and
- the Department of Transportation were told that that was the
- clean team recommendation some two years ago in the summer of
- 18 2020?
- 19 **A.** No.
- 20 Q. Okay. But are you aware that American Airlines stopped
- 21 serving that route earlier this year?
- 22 **A.** No.
- 23 Q. Okay. So, then, I quess this sort of predicts the next
- answer to the question -- I mean, did you consider the
- 25 possibility of studying the fares on that route since

- American's metal went away to see if the outcome was anything 1 like what you're predicting? 2
- 3 Α. No.

- 4 0. Okay. Robin Hayes testified early in this trial that JetBlue is still charging its same low fares on that route. 5
- Do you have any basis for contradicting him?
- I'm not even sure the data are available to check. I 7 don't have a basis for suggesting otherwise. 8
- Q. I want to go to this question about validating your 9 predictions of your simulation. Now, the fact of the matter
- 11 is, is that you didn't do anything when you put forth your
- initial report, or your reply report, to validate the 12
- 13 predictive power of your merger simulation against any merger
- 14 benchmarks, correct?
- A. Yeah, I believe that's true. 15
- Okay. And when you were last here, you offered your 16 Q. slide 66 --17
- 18 MR. WALL: Which if we have that from his demonstratives last time --19
- BY MR. WALL: 20
- Q. -- claiming that the simulation results were consistent 21 with the JetBlue effect, right? 22
- 23 Α. I don't remember the particular slide.
- Yes, this one. 24
- Okay. But as we discussed, the JetBlue effect is not a 25 Q.

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merger effect, right?
    It's not merger.
    Okay. And the professional standards among economists
Q.
are that, to use a merger simulation, you need to be able to
show that the oligopoly model employed explains the past well
enough to provide useful predictions of the future, right?
    I disagree. But I do think -- there are different ways
to validate a model and I could explain that if you like.
Q. Let me just instead put up what Drs. Greg Werden, Luke
Froeb, and David Scheffman -- the latter two being former
chiefs of the FTC Bureau of Economics -- Dr. Werden, the long
time DOJ economist you mentioned earlier -- wrote in their
article about a Daubert discipline for merger simulations.
          And what they state here --
          MR. WALL: That's not the quote. Sorry. That's
the wrong quote. It's above that.
          We'll put it up here for you, sir.
          That's not the marginal cost one.
BY MR. WALL:
    Okay. Let me just move on from that, because we don't
have that and, unfortunately, we don't have time.
          I want to -- let's talk about your slide 41. Let's
put on slide 41 of your presentation this morning.
          THE COURT:
                      31?
          MR. WALL: 41.
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BY MR. WALL:

- Q. Okay. So let's just be clear what you've done in this slide 41, is you have an array here, a number of articles and other sources for the average -- the observed average effects of various -- of airline mergers, right?
- A. Not only airline mergers, but there are some airline mergers on this chart.
- Q. That's -- that's correct. Okay. The simulation results are on there as well, right?
- A. As well as the defendants' advocacies, quantification of the JetBlue effect, and my own econometric work.
- Q. Okay. So the dark blue bars, including the highest one on the left there, that's from that study from Dr. Peters of the early airline mergers in the '80s and '90s, correct?
- 15 A. That's one of the mergers studied by Dr. Peters, yes.
- Q. Well, all of the mergers that he studied in that article occurred in the '80s and '90s?
- A. I'm sorry, I thought you were referring to the single bar that's on the left.
- Q. But according to the legend, the dark -- the -- the -- almost black bar, I suppose it is, is Peters from 2006, right?
- 23 A. That's one of the mergers he studied, yes.
- Q. Okay. But his -- his appears more than once on there?
- 25 **A.** That's right. He studied five different mergers.

Q. Yeah. Exactly. Okay. So what I wanted to do here is, we prepared something while you were testifying that modifies this chart a little better. And I'll ask -- put that on. And what we've done here is we've removed the references to Peters from the old mergers, and now what we're left here is the other bars, but also we have added in a dotted red line across the -- the chart, I think 28.7 percent value, which is your estimated average increase on the Boston overlaps when weighted.

Do you see that?

A. I do see the graph.

- Q. Okay. So now, with respect to all of the other bars that are left on this chart, you have -- you have created for the -- for the Boston nonstop overlap routes an average, a weighted average, estimated overcharge that much larger than anything that has been observed in any prior airline merger, regardless of who -- who has studied it, with the sole exception of one entry from Dr. Peters' 2006 article, correct?
- A. Now this is no longer apples to apples. You're selecting a subset of routes where prices are higher and comparing them to an average effect across other articles.

As you know, my model predicts a bunch of low numbers as well in New York, and that's part of the average --

- 1 Q. Excuse me, sir. I was asking you about Boston.
- 2 Actually, I'll -- go ahead and finish that. Your model has a
- bunch of low numbers in New York, right?
- 4 A. Some of the numbers in New York are low.
- 5 Q. Right.
- 6 A. It depends on the market.
- Q. And the value of commerce in New York, because New York
- 8 is so much bigger, is much larger, right?
- 9 A. I don't know. I think New York has more commerce than
- 10 Boston.
- 11 Q. Right.
- 12 A. It's not a number that I've looked into.
- 13 Q. So when you get that average figure that you like to
- point to, that's being pulled down by the lower estimated
- increases and the greater volume of commerce in New York
- relative to Boston, correct?
- 17 A. I mean, that's what an average is.
- Q. Of course it is. But if we look at the entire cohort of
- Boston routes alone, you are getting a weighted average
- 20 28.7 percent increase in price predicted from the NEA, right?
- 21 **A.** Yes.
- 22 Q. Okay. And that -- that number is multiples of what has
- ever been found as the actual effect of any consummated
- airline merger, unless we go back to Dr. Peters' studies of
- 25 mergers from the last century, right?

- A. I don't think that comparison can be made.
- 2 Q. Is it correct what I said? Yes or no?
- A. Mathematically, the 28.7 is higher than the recent studies of the legacy mergers, as I understand it.
- Q. Okay. And as we discussed last time, if you focus on
- the -- the literature that is honed in on nonstop overlap
- 7 routes between hubs, hubs like Boston to Philadelphia or
- 8 Boston to Dallas, that literature consistently finds that
- 9 mergers have resulted in lower fares and expanded output,
- 10 correct?

- 11 A. I think that's a mixed literature, but those are also
- routes that are affected by divestitures often.
- Q. Well, so are these. You do understand that there were
- 14 divestitures in New York, right?
- 15 A. There's a limited number of slot divestitures according
- 16 to the DOT.
- 17 Q. Right. And if we don't meet the growth commitment and we
- have to -- to divest ten more slots, there will be the same
- number of slot divestitures in New York as -- from the NEA,
- as there was in the US-American Airlines merger in New York,
- 21 correct?
- 22 A. I -- I don't know the details of that merger.
- Q. Okay. I just have one last point that I want to make
- with you. Did you listen to Dr. Town's testimony?
- 25 A. I was able to listen to most of it, yes.

- 1 Q. Okay. Mr. Schwed asked him about an exercise that
- 2 Dr. Israel did in response to criticism -- criticism by
- 3 Dr. Town that -- and what he said is that Dr. Israel had not
- 4 shown that his consumer benefits estimate was valid for your
- 5 nested logit model. Do you recall that?
- 6 A. I don't recall it specifically.
- 7 Q. Okay. Well, let me ask you this. Are you familiar with
- 8 the fact that in a September 6th supplemental submission,
- 9 Dr. Israel offered an estimate of consumer benefits using
- 10 your nested logit demand specification that put benefits at
- almost \$2 billion?
- 12 A. Yes, I'm aware of that.
- 13 Q. Okay. Now, you never replied to that in any subsequent
- submission or testimony, did you, sir?
- 15 **A.** No.
- Q. So yesterday, when at page 75 of the afternoon
- 17 transcript, Dr. Town testified that you had criticized that
- work by Dr. Israel, he certainly wasn't referring to anything
- in your reports or any testimony you gave, was he?
- 20 A. I think he was referring to --
- 21 Q. Yes -- can you just answer my question yes or no? He
- wasn't referring to anything in any reports or testimony that
- 23 you gave in this case, correct?
- 24 A. I believe that's --
- MR. DeRITA: Objection. He can't answer what

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Dr. Town is referring to.
1
               THE COURT: He's not asking what Dr. Town's
 2
     referring to. He's asking whether he could have relied on
 3
     anything he, Dr. Miller, testified to or wrote in his
 4
     reports. That, he could answer, I think.
 5
               MR. DOIDGE: Your Honor, just so I'm clear I
 6
 7
     understand, Dr. Miller discusses Dr. Israel's attempt to
 8
     use --
 9
               MR. WALL: Excuse me, sir. You do not get to give
     the answer.
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11
               THE COURT: I don't think the question is --
               MR. DOIDGE: You were making a representation.
12
                                                                I'm
     allowed to object to the representation.
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               THE COURT: The representation of --
               Well, what's the question again, Mr. Wall?
15
     BY MR. WALL:
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          The question is, is -- when Dr. Town testified yesterday
17
18
     that you had criticized Dr. Israel's estimate of consumer
19
     benefits based upon your nested logit demand specification,
     he couldn't have been referring to anything you had put into
20
     your reports or your testimony in this case, yes or no?
21
          I could clarify.
22
     Α.
23
               THE COURT: Forget about whether Dr. Israel
     testified to that or not, because that's what there might be
24
25
     a dispute, the representation, but as to whether or not you
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put that in your report or your testimony.
1
                THE WITNESS:
                             There's some confusion that I could
 2
 3
     clear up if you'd like me to.
     BY MR. WALL:
 4
          Can you please just answer the question?
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                THE COURT: Just the question.
 6
                THE WITNESS: Okay. So the question is did I reply
 7
     to the consumer benefits of analysis that Dr. -- because he
 8
     did two.
 9
     BY MR. WALL:
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          In his September 6th supplemental report --
          The September 6th supplement, I did not reply to.
12
     Α.
               MR. WALL: Thank you, sir.
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14
               No further questions.
                THE COURT: Any redirect?
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               MR. DeRITA: Yes, Your Honor.
16
              REDIRECT EXAMINATION BY COUNSEL FOR PLAINTIFFS
17
     BY MR. DeRITA:
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19
          Dr. Miller, Mr. Wall had asked you some questions about
     mechanisms that may or may not be in your model that reflect
20
     your findings of harm and specifically was talking about
21
     whether capacity was in your model.
22
23
               Do you have anything to add to your explanation of
     answers you gave regarding that?
24
25
               MR. WALL: I object to the form of that question.
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The question "Do you have anything to add?" is too vague.

THE COURT: Sustained as to the form.

BY MR. DERITA:

- Q. Does -- is capacity reflected in your model somehow?
- A. The model holds capacity fixed as of 2019, and I'm analyzing the pricing incentives along the routes as they exist then.
 - Q. There was some discussion about the hypothetical monopolist test and the proposition as to whether every combination of airports in New York would -- and Newark -- would pass the hypothetical monopolist test.

What's the -- what's the relevance of multiple combinations of airports passing the hypothetical monopolist test?

A. Yeah, this is something that we talked about on direct, is that the guidelines acknowledge that sometimes you can have multiple combinations.

In fact, if a subset -- suppose JFK/LaGuardia -- market power matters there. And then we want to ask again, would market power, you know, be important if we also add Newark, the answer is always going to be yes, you know, given that a subset -- you know, you've got -- you've got -- a loss of competition matters for consumers. Like, adding even more loss of competition, you're still going to find it.

So the guidelines at that point tell you to focus

in on the competition between the merging parties -- okay? -- merger because it is in the merger guidelines here. It would be, you know, JetBlue and American in our particular instance. And to define the market that captures their competition, so that's JFK and LaGuardia when we're talking about New York.

And then the guidelines instruct us or recommend that you don't go further if you're just adding in distant substitutes. Okay? So if JFK/LaGuardia passed the hypothetical monopolist test, we don't need to go further if we've got the competition reasonably captured and what we're essentially doing is bringing a distant substitute in Newark.

And that's an empirical question, is Newark a distant substitute? But that's what I've tried to provide evidence to answer.

- Q. Let's talk about entry and repositioning. You mentioned that you had done some route-level analysis but didn't, I think, get to fully explain your answer. How does your analysis of entry and repositioning relate to route-level entry and repositioning?
- A. Well, the -- take a -- let's take a step back. You know, what do we have in the model? And what do we think about the economics of this? You know, one of the big beneficiaries of JetBlue and American being able to exercise more market power on the -- along the routes are its competitors.

In other words, take a route where Delta flies as another option. Delta is one of the biggest competitors — excuse me — beneficiaries of the NEA. And the reason is that, as prices go up, customers — some customers don't want to pay the higher prices and they look for alternatives. And some of those will find other alternatives in products like a product that Delta might offer.

And so the economics indicate that Delta now has — has some choices. You know, it could maintain its prices and just sell more product, and that's a good thing; or it could raise its prices and still sell more product, and that's an even better thing. And — and the model implements that.

And so the model allows for Delta or any other competitor on the route to expand what -- to expand the number of tickets it sells, to be the beneficiary of the NEA along the lines of what economic theory would predict.

And so, for example, in Charlotte and Boston, for example, the share of Delta, I believe, roughly doubles.

Okay? And this is a connect product in the context of 2019, so that traffic is accommodated through a number of different hubs. It's not hard to double traffic, but Delta gains a lot.

Now, there's a different question, which is does it make sense for Delta then to make subsequent investments into that market? And that's -- you know, there's not an obvious

answer to that. There are certainly trade-offs, that if Delta wants to relocate a plane, it's got to take the plane from somewhere else. And that sort of trade-off makes me think that it's unlikely to happen at the level that would substantially mitigate the effects.

And I've got a paper -- I've got a research paper on this. It looks at how strong that incentive is, and it's a lot weaker than some folks might think it is. It's not a huge incentive to reposition in. There's not a lot of extra profitability for doing so above and beyond the benefit that Delta already obtains. And then putting that together with the frictions that I've identified, I don't see a reason that -- that reposition can just be assumed to solve all the problems here.

- Q. You were asked some questions about whether you account for any additional frequencies that might be added through the NEA. Can you explain whether your analysis accounts for that?
- A. I can. And -- and I think some clarification, maybe, is appropriate here. The assertion, I believe, that Dr. Israel makes in the context of his report -- but he didn't testify to this, at least directly -- is that -- is that putting the schedules of JetBlue and American together creates more options for consumers.

But it's not quite the right interpretation because

consumers could have picked any of these flights initially, and they can pick any of those flights afterwards. And so the real question is sort of what sort of incremental benefit do customers get from being able to buy a JetBlue flight through the American website or vice versa?

And that's an empirical question. There are reasons that folks might have that you're reluctant to buy JetBlue from American for a variety of reasons. Maybe customer service isn't as good. That's not particularly report. Professor Town highlights a bunch of those in his report. But there's research on it. That's one important point.

And Dr. Israel, in his own analysis, his own research paper, concludes that customers just don't know value frequencies offered by a codeshare partner in the same way that they value buying an American ticket on American.

And that makes sense because someone who will buys an American ticket is probably doing it because they want an American flight. That's sort of why they're doing it. So the extra option to buy on JetBlue just, by definition, just isn't going to matter as much.

So in thinking about that, I pushed it further, and I looked at the frequencies in which you actually have this sort of thing where a carrier buys sort of, you know, JetBlue on American. Okay? But first I looked at the West Coast

alliance between -- it was maybe a joint venture. There's not too many instances in data where you can get a good sense for this.

But I looked at American and Alaska first, and I just looked to see how often do they — how often do consumers choose though codeshare flights compared to what Dr. Israel puts into his report, which is that they're just completely indifferent.

And the answer is that -- is that consumers don't like to buy codeshare flights where it's, you know, American and then on to JetBlue. Like, they just -- it turns out, you look at the data, it doesn't happen all that often, much less than Israel represents -- Dr. Israel represents.

Then I updated that analysis to look at the -- the NEA along routes where -- where these sort of codesharing options were available in both directions, so you could buy American on JetBlue and JetBlue on American; and I found the same thing, that just the fact of the matter is folks tend to buy -- from American.com, they buy an American flight; and from JetBlue.com, they fly a JetBlue flight. And that's just what shows up in the data.

And, you know, I -- I could have presented this initially; but, actually, Dr. Israel didn't even testify to this analysis. And so, you know, going to great lengths to rebut it and show why it didn't make sense is, you know, not

something that I took pains to do until it came up on cross here.

- Q. You were asked a hypothetical by Mr. Wall that related to an assumption that JetBlue would add business passengers on JFK and LaGuardia. Do you remember that hypothetical? It was -- it was shown during a Delta document, while a Delta document was on screen.
- A. I'm sorry. I don't remember the detail of the question -- the details of the question.
 - Q. Maybe the next question will get you there. In discussing the hypothetical, there -- was there any -- was there a question about what the net effect of JetBlue adding new business routes for J- -- or new business passengers for JFK/LaGuardia would be?
 - A. Oh, yeah, I can try to clarify this. And it's something that Professor Town has talked about in great length, and so maybe I can just point to some of the things that he said.

But, you know, if — if what this is, is simply

JetBlue replacing an American flight, it's not clear there's

net growth; or if it's the case that, you know, JetBlue comes

in with a bigger plane than American, it's not necessarily

the case that American might not have expanded in the future

on its own.

And so that's sort of a question of what the but-for world is, is sort of central to understanding what

the net benefit is. And -- and that's what I was -- I was attempting to clarify. But on these efficiencies questions, these are things that Professor Town has addressed in detail to a greater degree than I have.

- Q. Shifting to the difference-in-differences discussion,
 Mr. Wall had asked you about whether you had done any work to
 identify control groups, and you said that you hadn't. Why
 did you not do that?
- A. Why I anticipate all the problems that showed up in Professor Carlton's analysis, and in addition to other problems that I explained. And, you know, when it comes down to it, we can look at Boston and ask the question whether there are going to be control routes that make sense here, and we just answered that pretty much straightaway, because the nonstop overlap routes, for the most part, they go to American hubs, and these are sort of a specific set of cities.

The other routes go -- JetBlue flies them nonstop.

American doesn't. They go to different destinations, so right away, you just have a very different sort of location, a type of customer that's going to be attracted by these -- by the offerings. You have a different degree of competition. And all of that makes it -- makes me have serious concerns about whether it's possible to identify a set of controls that's going to respond to external stimuli

like demand changes or cost changes or COVID-19 in the same way that the treated routes would.

So this is one of the concerns that I had about the -- the feasibility of gaining insight; and, really, all that played out in Professor Carlton's analysis.

Q. So I want to ask you about a slide that you were shown by defendants. It was a demonstrative they just created within the last hour. I don't have a copy of it.

MR. DeRITA: Do you mind putting it up? It was the slide 41 variant that you have, without Peters, with the red bar across the top?

Yeah, that's it.

BY MR. DERITA:

- Q. Dr. Miller, you had mentioned that this slide is not an apples-to-apples comparison. Why is that?
- A. Well, it's just it's really selective in a lot of ways. I mean, for one, they took off the merger that actually gets to that level. Second, they're looking at a subset of routes. I mean, they didn't, you know, have to stop at Boston. They could have said we're going to look at a subset of the routes that generate even higher price effects.

You know, so the notion that you can go to 28.7 to say, well, what about this number, you know, they can put any number they want up there. Some of these aren't likely to

manifest even as pricing increases.

As I was testifying before, you know, some of the larger price increases are likely to be sort of one carrier ceding a route to the other carrier, and that's going to generate -- you don't see the 150 in the data. I just don't understand how the 28.7 is compared to the average effect of other things. It's not even my average.

So I -- that's -- that's -- that's, you know, one observation. The other observation is it's not even that far even if you took it for a given -- it's not that far from the defendant advocacy where -- quantification of the JetBlue Effect.

And then, with respect to the legacy mergers, these are events that I really don't think are all that comparable. So -- and even some of those are generating price effects, on average, that are, you know, look like more than half of the 9 percent. So what we learned from the legacy nonstop -- the legacy mergers at the end of the -- you know, in the recent history, I think is not very much, but I don't know. I just look at this chart and I see a lot of things that are sort of meant to convey a certain impression that doesn't make a lot of sense to me.

Q. You were asked about a September 9th submission by Dr. Israel attempting to use your model to estimate consumer benefits. Are you aware of whether Dr. Israel submitted

anything else before that, attempting to also use your model to look at consumer benefits?

- A. This is the other exercise, I believe, that Dr. Israel submitted about putting frequencies together, and he didn't testify to that, to my understanding. And but I responded to that exercise in full in my reply report, including the description of the data analysis that I gave a moment ago.
- Q. How did you respond to that?
- A. Well, it really has, I believe, if I'm remembering, a three-part response. It points out that there are reasons to think that -- I've already given it -- the reasons to think that, you know, someone buys, on JetBlue, an American flight, that that's not as much value. They had already had these options available. Israel, himself, recognizes they're not as good in his research, and you look in the data, and sure enough, our estimates suggest that it's just -- you know, this is an inconsequential benefit to -- as Dr. Israel has attempted to quantify it.
- MR. DeRITA: I have nothing further. I'll pass the witness. Thank you, Your Honor.

THE COURT: All right.

MR. WALL: Just a few.

RECROSS-EXAMINATION BY COUNSEL FOR AMERICAN AIRLINES

24 BY MR. WALL:

Q. First of all, what you actually said in your reply report

- was that you thought that codesharing alone was much less
 valuable than another flight on the marketing carrier, right?
- A. I did multiple things, including looking at the NEA specifically, so --
- Q. Yeah. And -- but you could -- you put a number on that, and you said it was about 25 percent is valuable as another flight on the operating carrier, right?
- A. No, I don't think that's -- that's the words that I would have used for that. I could clarify, if you like.
- 10 Q. Okay. Let me just move on to a couple of other things.
- Did you see any evidence in your review of this case that
- Delta Air Lines thought the Northeast Alliance was good for
- 13 Delta?
- 14 A. I've looked at a lot of documents. I may have seen one
- that is like that, but I don't have particular memories of
- specific documents.
- Q. You've seen a lot of documents from Delta talking about the threat that the NEA poses to it, right?
- A. I've seen a lot of documents. I don't want to represent that I've seen documents that say a particular thing on this.
- 21 **Q.** I mean --
- 22 **A.** Do you have something you'd like me to look at?
- Q. We don't really have the time. I wish we did. But let
- me just ask you, sir -- is it your impression that the weight
- of the evidence in this case is that Delta Air Lines thought

- 1 that the NEA was a good thing for it?
- A. I don't want to characterize what Delta says, thinks. I can characterize the economics.
- Q. And if they have a different point of view than what you come to through your evaluation of the economics, would you just say that they're just -- they don't understand and they're getting it wrong?
- A. I'd have a lot of questions. I'd be curious and maybe we would all learn something.
- Q. Have you made any effort at all in this case to study the competitive reactions of Delta or other airlines to the NEA?
- 12 A. Yes, I have.

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- Q. And have you seen that, in fact, Delta Air Lines has
 taken actions that can be reasonably viewed as a response to
 the NEA? For example, announcing service between Boston and
 Charlotte?
- A. No. To the contrary, my report provides some evidence
 that Delta has not responded by adjusting its schedules or
 its -- or its routes in response to the NEA. And I believe
 the reply report also shows support for the same with United.
 - Q. Have you seen any evidence that Delta or United have begun to restrict their capacity in the Northeast as a result of the NEA?
- A. No, I have not seen that evidence.
- Q. In fact, you've seen plenty of evidence that both United

- and Delta are expanding output and capacity in the NEA territories since the NEA was announced, correct?
 - A. I -- this isn't something that I've looked into. I think other people could probably speak to this more than me.
 - Q. The last point I want to talk to you about is about this recurring issue of robbing Peter to pay Paul. First of all, your model doesn't actually predict whether there is any phenomenon of -- of funding or robbing Peter to pay Paul, does it?
 - MR. DeRITA: Objection. This -- "robbing Peter to pay Paul" exceeds the scope of his testimony today.
 - MR. WALL: No, it doesn't. It has to do with the treatment of capacity.
 - THE COURT: What does it have to do with the treatment of capacity?
 - MR. WALL: He just testified on redirect about the treatment of capacity in his model.
 - THE COURT: Oh, yes. So that, you can ask him about.
- 20 BY MR. WALL:

Q. And so let me just be clear. You're just -- when you talk about the possibility of funding and things like that offsetting the capacity gains of the NEA, you're just making an assumption that in some sort of Newtonian way, for every consumer benefit from growth in one region, there must be an

- equal and opposite consumer harm from retraction somewhere 1 else, right? 2
- Wrong. 3 Α.

11

22

23

- 4 Ο. You haven't studied whether there's actually been any consumer harm in any part of the country from which the 5 aircraft have come in order to -- to serve the NEA regions, 7 have you?
- A. I don't think I've analyzed that question at all. 8
- Q. Exactly. One could do that. One could identify the market from which an aircraft came and try to determine 10 whether there was an adverse effect on fares in such a market, right? 12
- 13 Α. I don't see how that's relevant for my analysis.
- 14 Q. I didn't ask you that. One could do that, correct?
- I don't know. 15 Α.
- Q. But you haven't, right? 16
- Α. I have not. 17
- 18 MR. WALL: Thank you, sir.
- 19 THE COURT: All right. You're excused. Thank you very much. 20
- Is that it? 21
 - MR. JONES: Your Honor, I'm going to ask Mr. Moore to come up. We do have a couple of document issues --
- THE COURT: All right. 24
- 25 MR. JONES: -- to address.

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THE COURT: No more witnesses?
1
               MR. JONES: No more witnesses, Your Honor.
 2
               MR. WALL: I'm also told there's some deposition
 3
     designation issues we need to deal with.
 4
 5
               MR. MOORE: Yes, unfortunately, I'm not here to
     cross, Mr. Wall. Just some housekeeping matters.
 6
 7
               MR. WALL:
                          The offer still stands.
               MR. MOORE: So we have a few supplemental exhibits
 8
     that are unobjected to by defendants that we want to move
 9
     into evidence. We have a list --
10
               THE COURT: Fine. I'll take that list.
11
               So just so the record is clear, Ms. Belmont has a
12
     copy, and we'll admit into evidence all of the -- there's no
13
14
     objection by Mr. Wall to these?
               MR. WATT: No.
15
               THE COURT: Okay. So this two-page list of
16
     exhibits starting with PX-461, and the last entry is PX-1155,
17
18
     are admitted into evidence without objection.
19
                (Plaintiffs' Exhibits as stated on the two-page
               list, beginning with PX-461 and ending with
20
               PX-15155 admitted into evidence.)
21
               MS. TAVERNIA: Your Honor, I think that list is not
22
23
     consecutive, though.
               THE COURT: No, it's not consecutive. I'm just,
24
     for identification purposes -- thank you for that
25
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clarification -- listing the first and last one.
1
               Anything else for you, Mr. Moore?
 2
 3
               MR. MOORE: A couple of other things. So the Court
 4
     asked earlier in the trial for a list of the deposition
     excerpts that were admitted during our examinations for
 5
     impeachment, so we have a hard copy list of that.
 6
 7
               THE COURT: Oh, okay.
               MR. JONES: Impeachment or, Your Honor, just
 8
     admissions as party opponent, most of them were in that
 9
     latter category.
10
11
               THE COURT: All right. You gave a copy to the
     defendants?
12
13
               MS. TAVERNIA: We have an electronic copy.
14
               THE COURT: Fine. Okay. It might be helpful to
     e-mail Ms. Belmont an electronic copy of this, too, so we
15
     have it electronically.
16
               All right. What else?
17
18
               MR. MOORE: So we have a thumb drive that's the new
     exhibits that have come in since the trial started. There's
19
     been some exhibits that have been added, so we have an
20
     electronic copy of that.
21
               THE COURT: Okay. I'll take that.
22
23
               MR. MOORE: And then the last thing actually
     relates to an earlier point. We have a thumb drive that has
24
     the demonstratives --
25
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THE COURT: I'm going to get impeached for plugging 1 these thumb drives into the judiciary network. 2 3 MR. MOORE: So you mentioned the deposition and an 4 electronic copy of the excerpts. We'll -- that will be on the thumb drive that we'll have tomorrow as well as some of 5 the demonstratives that have come up during trial. But I can 7 coordinate with Ms. Belmont. THE COURT: Just coordinate with Ms. Belmont. 8 9 That's fine. Okay. MR. MOORE: And that is it. 10 11 THE COURT: All right. And then what do you have? MS. TAVERNIA: Just a couple of things. So we will 12 13 also be providing on a thumb drive to the Court with the 14 additional exhibits and some of the confidentiality changes, but it's not here yet, so if --15 THE COURT: That's fine. As long as you coordinate 16 with Ms. Belmont, that's totally fine. 17 18 MS. TAVERNIA: And the other issue is deposition 19 designations. At the outset of the case, we entered a number of them into the record, and there were some more for 20 witnesses who were -- who were on the witness list and were 21 subsequently not called to testify. And so we have agreed 22 23 with the plaintiffs. It's a set of four, so we can provide those to the Court as well. 24 THE COURT: Perfect. All right. Anything else? 25

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MS. TAVERNIA: No. Can I bring them up?
1
               THE COURT: Of course.
 2
 3
               Tomorrow -- or the later thumb drive will have all
     of this electronically as well, right?
 4
               MS. TAVERNIA: We -- these were not on the thumb
 5
     drive, but we can provide an electronic set of all of the
 6
     deposition designations as well.
 7
               THE COURT: I think that would be helpful.
 8
               MS. TAVERNIA: Okay. That's no problem.
 9
               MR. JONES: Your Honor, one last very quick thing
10
11
     from us, which is just to thank Your Honor and Your Honor's
     team for the time and attention to this matter and thank
12
13
     Your Honor for you're your Honor's patience and forbearance
     as well.
14
               MR. WALL: We join in that, Your Honor.
15
     Your Honor, you've been extremely gracious to us, and we all
16
     appreciate it.
17
18
               I also want to just take this opportunity again to
19
     give my thanks to the public servants on the left. I'm an
     alum of the antitrust division. I still think it's the best
20
     agency, and I honor your work.
21
               Thank you.
22
23
               MR. SCHWED: Thank you, Your Honor.
               THE COURT: All right. Well, so thank all of you.
24
     You've done -- I appreciate it. It's -- sometimes there's a
25
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reason that the word "trial" is sometimes used in a context other than things that happen in the courtroom.

And so -- but, honestly, you know, in what is a -- which has -- a case which has the features potentially of what I have learned, sometimes painfully, certain attributes that sometimes lead to a very disagreeable experience, which is a case which is very much is at stake and in which the lawyers on this side are from different cities and thus might not -- and not from here -- not that there's something special here, but meaning that they won't likely be in front of me again. So there's no repeat player effect that curves behavior.

And maybe here you aren't quite in the situation to never deal with each other, but sometimes that leads to very unpleasant outcomes where people can't agree on anything at all, even, like, whether it's a direct examination or who called the witness or, like, things that are beyond comprehension.

So, anyway, none of that's happened here. You really worked very hard, I know, to, first of all, just eliminate lots of objections and issues and resolve things and work cooperatively with each other under the circumstances.

And that makes it, like -- well, that's really helpful. It's helpful for me because there's just a limit to

how many -- you just can't possibly bring every conceivable thing that you -- that the 40 or 80 or however many there are of you could dispute to me to resolve. It's just not possible, and so I appreciate that.

And that also helps focus the whole case and focus for me on what are the real merits and what are the real issues and what's, you know, substantially in dispute? So I appreciate that very much.

I can't say -- as much as I have enjoyed this, and I find it fascinating in many respects, I can't say that I'm sorry I won't be seeing you tomorrow morning. I just want to be perfectly honest. I mean, I have enjoyed seeing all of you, but it -- it's been awhile.

And so in terms -- so I wish you all good luck as you go forward, but in terms of the last little wrinkle, you had agreed on a date, I think, of the 9th, if I remember right, but I could be wrong, a date for posttrial briefs. If you want more because we've gone longer, I don't -- that's fine, and you could -- if you want to push it out a little bit, if you want to keep to that date, I mean --

MR. WALL: I think our date was actually a -MR. JONES: It was a flowing date. It was three
weeks. It would be three weeks from today.

THE COURT: That's fine. I'm not, like, rushing you on that.

MR. WALL: Yeah.

THE COURT: And so that's fine. So I will just -- I mean, I'll be looking at things, but I'll be -- I'll wait for that, probably, to some degree.

And you'll hear from me. I mean, to be honest with you, my view of -- my -- you'll hear from me in terms of a hearing on it when I'm ready. And when I'm ready will be when I have digested not only all the testimony, but the exhibits and the documents and particularly your posttrial briefs.

I know, just to confirm, you'll be submitting them not only electronically, but hyper would be very helpful, especially to link to the exhibits, even if you to give me a new thumb drive that has all the exhibits and the posttrial briefs, but something so we can click on it, and that would be really helpful.

MR. WALL: Right.

THE COURT: And so when that -- and, you know -- and I'll tell you what I tell everyone, which is, like, I would hope -- like, my goal is to resolve it really fast. I know that it's really significant for all of you, and time is, to some degree, of the essence.

I mean, you did this in a year from complaint to now, which is fast. I mean, I get lots of lawyers complaining to me in garden variety cases that aren't nearly

the size and complexity of this when I want them to get to file the summary judgment motion within a year of the -- so I know that it's been -- or, you know, a Herculean task for all of you, and not only the last three or four weeks, but the entire year leading up to here.

And so I very much intend to try to do it as quickly as I can. I can't tell you how fast or slow or in between that will be. I just don't know. But I won't want to have the hearing until I've pretty much figured that all out so I can honestly make profitable use of my time with you and have useful questions to ask.

So it is something that, you know, I can't put -I'm not going to just put it in the queue at -- like, from -with all the other things. It's a significant case. So
beyond that, I don't have any more predictions.

MR. WALL: Thank you, Your Honor.

MR. JONES: Your Honor, if I may, has Your Honor given any additional thought to a time for closing?

THE COURT: So here's the practical reality in terms of that. I can't -- I'm literally -- I'm going from this -- I have a pretrial conference in a criminal trial that starts on Monday with, you know, a fair stack of motions that I have to go through and resolve.

So there's no way, until I'm past that, I can see you. I just don't have any time in my schedule between the

trial and other hearings that are hearings that I can't fairly move. So, I mean, that's not a super long trial. I think it will be over sometime between Thursday next week and Tuesday the following week.

MR. WALL: Your Honor, I was going to just make a suggestion on this, because something occurred to me from a prior case, a merger case I handled where the district judge had the closing arguments later and allowed people to give sort of a closing argument, but had issued a number of questions in advance and basically said, "Work them into your closing," so that it -- it's --

THE COURT: So I'm perfectly happy to do that. The idea of an iterative process is, like, the way I view the whole process anyways, so I like that idea. And it lets you be prepared, as opposed to blindsided by my questions —

MR. WALL: Right.

THE COURT: -- and -- at a hearing, which is -- probably get better answers. And so I'm open to that.

You know, I'm open to the possibility of giving you a closing argument time, like, something in the vein of two to three weeks from now when I'm past this other trial -- and so that -- I just -- as a practical -- so if that's what you want, I will think about that. And I guess what I'd say is I'll get back to you in a couple of days, and I'll propose -- and -- if that's what you want.

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MR. JONES: That is what we would prefer,
 1
     Your Honor.
 2
               THE COURT: Okay. So then let me think about it a
     little bit, and I'll get back to you in a couple of days.
 4
     And what I'll do is probably issue a time for it.
 5
               And what I'll say to you about the time is, when I
     issue -- and so I'll block out a morning, basically, or an
 7
     afternoon. You don't have to view the time as the tablets.
 8
     I mean, like, if it doesn't work, you can work with each
     other. You can work with Ms. Belmont.
10
11
               I'm just -- I'm just starting -- I'm just saying,
     well, this is when, and then you can -- if you want a
12
13
     different time, just talk to the other side and talk to
14
     Ms. Belmont if that time is no good because of whatever, and
     I'll let you -- sort of the three of you work that out.
15
               MR. WALL: I just note I have a conflict on
16
     November 10th and 11th. So if that could be avoided, that
17
18
     would --
19
               THE COURT: It definitely won't be on
     November 11th.
20
               MR. WALL: That's true. I quess that's right.
21
               THE COURT: Yeah. So -- and I'm happy -- like, if
22
     I had issued November 10th and it's a conflict for you, it's
23
     fine. Don't -- you know, you can talk to the other side,
24
     talk to Ms. Belmont, and work out a different date.
25
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MR. WALL: Thank you, Your Honor. I appreciate it.

THE COURT: That's fine.

I think the only other thing that -- do either of you have anything else?

MR. JONES: Not for plaintiffs, Your Honor.

MR. WALL: No.

MR. SCHWED: No. No, Your Honor.

THE COURT: Then, the only other thing I just say now -- it's not about the merits at all -- but I know that -- I really know a lot of heart and soul and effort and sweat and pain went into this whole year and -- for all of you, including the last four weeks, and none of you are from here, so it's a lot easier for me to come here every day than for all of you. So I do appreciate that.

But, also, I know that each of you, to the extent you thought reasonably possible under the circumstances, gave people with less experience, whatever that means in the relative dimensions, the opportunity to participate. And I appreciate and commend you for that, because I do think that there's one trend I don't need an economist to tell me about, which is that the opportunity for lawyers to speak in court is declining, especially precipitously for people with less than 5, 10, even 15 or sometimes 20 years of experience, but certainly 5 or 10 years. And it's the nature of lots of different things going on.

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So to the extent you did that, I appreciate it.
 1
 2
     mean, it doesn't change the outcome, but it is something I
     note and I commend you for because that's how -- it's just, I
     think, important for the profession, and as a whole, it's
     important for the individual people's development. And it's
 5
     probably good for the Court too. That's less clear.
                Anyway, so thanks a lot, and I'll see you in a few
 7
 8
     weeks.
                (Court in recess at 12:51 p.m.)
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1	CERTIFICATION
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3	
4	I certify that the foregoing is a correct
5	transcript of the record of proceedings in the above-entitled
6	matter to the best of my skill and ability.
7	
8	
9	
10	/s/ Rachel M. Lopez October 27, 2022
11	/s/ Robert W. Paschal
12	
13	
14	
15	Rachel M. Lopez, CRR Date
16	Robert W. Paschal, RMR, CRR
17	Official Court Reporters
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